

PHILLIPS PETROLEUM TOMBSTONE AL STATE SW SW 14-20S-23E COCHISE COUNTY 716

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DETAIL OF FORMATIONS PENETRATED

Formation	Тор	Bottom	Description*
CORES -			
54731 -	5479' -	Cored 6', f	ll recovery.
6061* -	60931 -	Cored 32',	ec 31'.
6503' -	6522' -	Cored 19',	rec 15'.
	8186' -	Cored 6', r	de 6'.
	8840' -	1.	arrel jammed, rec 1'.
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, 8840		. , .	
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<sup>\*</sup> Show all important somes of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, enshion used, time tool open, flowing and shut-in pressures, and recoveries.

INSTRUCTIONS:

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Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion reported well log shall be filed with the State of Arizona. A Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

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lessor's name i	f fee lease. Tom	bstone	State-A	] ]		ec-Two-F	tge or Blo	ck & Survey	County	
ocation of Well	& 850' FSL,	SW/4 S	W/4			Sec.	14~T20	S-RZ3E	Cocnise	
	ill this well was filed		Has this well produced oil		Character of well Oil (bbls/day)		Gas (MC	F/day)	Try:	
	Petroleum Co	mpany	No					<u>_</u>	Yes	
ate plugged:			Total depth 10561		Amount well pro- Oil (bbls/day		Gas (MC	eu: (F/day)	Water (bbls day)	
9/16/			<u> </u>	<u> </u>	Depth interval of	each for	mation i	Size, kind &	depth of plugs used	
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	<del></del>			CASING	RECORD			B	1 ab a a a	-
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<del> </del>					Indicate deepest			net from wat	ar	-
Was well fi Yes	iled with mud-lader	s fluid, acco	rding to regulat	ions?	No Water	Beds V	erifi	ed Durin	g Drilling	_
	NAMES AND	ADDRESS	ES OF ADJACI	ENT LEAS	E OPERATORS O	ROWNER	S OF TH	E SURFACE	: :	_
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D1.4114	Dobuolosm	Compani	7			dead by c	aid comp	any to make	this report; and that thi	is
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_	y 20, 1982				Signatur	re D.	J. Fi	sher		-
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CLICATION TO ABANDON AND PL

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	None					0	& G CONS.	COMM.
FIELD	Phillips Pot	coleum Co		ADDRESS P.O	. Box 2920 Ca	sper,	Wyoming	82602
OPERATOR Federal, Sta	ate, or Indian Lease N Name if Fee Lease	umber	ostone Sta			LL NO	-	
LOCATION	600 i mil 8 8i		SW/4 SW/4	Sec. 14-20S-23	Ε,			
	Cochise Coun	y, Arizo	na					
TYPE OF V	WELL Dry Hole		Oil, Gas or Dry	Hole)	TOTAL I	DEPTH	10561	
ALLOWAB	LE (If Assigned)	None	Dit, 042 0: Di ,					
LAST PRO	DUCTION TEST	OIL	0	(Bbls.)	WATER	0		(Bbls.)
		GAS	0	(MCF)	DATE OF	TEST		
PRODUCIA	NG HORIZON	None		PRODUCING F	ROM	T	0	<del></del>
1. COMPLI	ete Casing Reco	RD_						
	9 40' G.L. 133#K55 ST&C @ 2	095						

#### 2. FULL DETAILS OF PROPOSED PLAN OF WORK.

It is proposed to set a 100' cement plug (190 sx) from 7456 to 7556; a 200' cement plug (365 sx) from 1995 to 2195 (100' below & above 20" casing seat 2095) and a surface plug & dry hole marker.

Above plugging procedure was approved by A.K. Doss in telephone conversation with Frank Lyte (Phillips Petroleum Company - Casper, Wyoming) on September 14, 1981 and work is in progress.

Date Approved 9-18-8/ SPATE OF ARIZON OIL & GAS CONSERVATION C		STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Application to Abandon and Plug File Two Copies Form No. 9
	Date	
	Address Septe	mber 15, 1981
		Box 2920 Casper, Wyoming 82602
		eering Director
MANA OF I MIGON DOMES WORLD	77	Stonen for P.B Hommeher
	Parker Drilling C	ompany ADDRESS Tulsa, Oklahoma
DATE COMMENCING OPERATIONS	September 14, 19	81

716 Permit No.

Ariz. O&G CC 1 - T.J. Jobin 1 - File

**;** 

9-14-81

Memo to File 716 From A. K. Doww

Permission given Frank Light of Phillips Petroleum, Casper, to Plug Tombstone well. Will plug well 9-15-81.

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OCT 9 1981

**NL INFORMATION SERVICES** 

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O & G CONS. COMM.

PHILLIPS TOMBSTONE STATE "A" NO. 1 Section 14 T20S R23E

Final Well Report

P/N716

PREPARED BY:

Michael Cady ADT Engineer

And

Michael Terelesky ADT Engineer TABLE OF CONTENTS

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## INTRODUCTION

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This report gives a summary of the drilling services provided by NL BAROID, a synopsis of the drilling activity, and a presentation of the data gathered.

Drilling began March 8, 1981 in Cochise County, Arizona, for Phillips Petroleum Corporation by Parker Drilling Company, Rig 166. On September 14, 1981, the hole was plugged and abandoned at 10,561 feet after 191 days of drilling. The times for each interval are shown below:

DAYS REQUIRED	OPERATION	INTERVAL
13	Drill 12-1/4" hole	62' - 2,118'
3	Open hole to 17-1/2"	62' - 2,118'
26	Open hole to 26"	62' 2,118
113	Drill 12-1/4" hole	2,118' - 10,561'
<u>36</u>	Open hole to 17-1/2"	2,118' - 7,558'
191		

#### **CADT WELL MONITORING**

The Baroid Computerized Applied Drilling Technology (CADT) Unit was put into full operation on March 8, 1981 at which time Parker Rig 166 drilled out from beneath conductor pipe at a depth of 40 feet. Full service was provided without interruption for a period of 173 days until August 28, 1981, at which time the Unit was put on partial service due to fishing problems encountered while opening the hole for intermediate casing. On September 14, 1981 (190 total days) as further problems forced abandonment of the well, the CADT Unit was released from service.

#### **CADT PARAMETERS**

While providing full service the following parameters were continuously monitored:

Depth

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Temperature In/Out

Weight on Bit

Pit Volume

Rotary Speed

Total Gas

Pump Strokes

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Standpipe Pressure

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Density In/Out

**Rotary Torque** 

Conductivity In/Out

Flow Out

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With the assistance of the on-board Prime 100 Computer the following parameters were calculated:

Avg. WOB for Drilled Interval Flow In Avg. Flow In for Drilled Interval Flow In/Out Difference Lagged Temperature Difference Lagged Conductivity Difference Drill Rate in Requested Units Average Torque per Interval Pit Volume Change Pit Volume Change per Minute **Total Hole Mud Volume Total Circulation Time Bottoms Up Time** Lagged Depth Revs on Bit Average Rotary Speed for Interval D Exponent Modified D Exponent Average Gas for Interval

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Critical Velocity Pressure Drops in Hole Jet Velocity Jet Impact Impact Area Bit Horsepower Horsepower Ratio **Equivalent Circulating Density Cuttings Slip Velocity** Maximum Cutting Size Cost per Foot Hook Load Time on Bottom Feet on Bit Strokes to Drill Interval Fracture Pressure

Pore Pressure

Annular Fluid Velocity

During trips for new bits the Baroid Trip Monitor Program monitored and calculated the following:

Actual Hook Load
Calculated Hook Load
Pit Volume Change
Calculated Drill String Displacement
Depth of Bit
Trip Tank Volume
Running Speed
Surge and Swab Pressures
Maximum Running Speed
Hole Condition Summary Prior to Trip
Flow Out

All of the parameters listed above were available to those concerned through a variety of sources.

- Video display screens placed in each trailer on location in addition to the doghouse and the CADT Unit.
- Silent 700 printer in CADT Unit
- Strip chart recorders located in Unit for graphic representation of more important parameters.
- Morning Report prepared by ADT Engineers each day. (See example.)

Easy access to this information combined with the attentiveness of the Loggers stationed in the Unit twenty-four hours a day allowed the saving of a great deal of time and money due to early recognition of a problem or problems in the developing stages.

Of the 25 washouts which occurred in the drill string while the CADT Unit was providing full service, only one resulted in a twist-off and rig personnel were notified of a drop in pump pressure a full 10 feet before this twist-off occurred.

Baroid personnel played an important role in minimizing mud losses due to equipment or formation failure. While drilling to the surface casing seat mud losses in the loosely cemented formation were reduced significantly through early detection. Mud costs at this point were relatively low but water to mix the mud was being hauled to location at a premium requiring that losses be kept to a minimum. Details on drilling problems encountered can be found in the Interval Summary Section.

The Baroid ADT Engineers made recommendations to drilling personnel through the use of the information available to them through the computer in the CADT Unit. Recommendations in reference to jet sizes, pump speed, bit type to run and mud weight were most common.

#### **DRILLING SUMMARY**

INTERVAL: 62 to 2,118 Feet

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March 8 - March 20, 1981

From the 30 inch conductor pipe set at 40 feet, a 12-1/4 inch hole was drilled to 2,118 feet in 13 days. Two more days were used to run E Logs in this section. Native water was used as a spud mud with no control on filtration loss. Average penetration rate was 10.8 ft/hr. Five bits were used, predominately F3's and J33's, at 10-15,000 lbs. with an average 60-80 RPM. Jet sizes were 15-15-15 with a 520 gpm at 900 psi. This section comprised mainly of sandstone and siltstone with the last 600 feet of the section predominately limestone. There were no shows in this section.

March 21 - March 23, 1981

Two Grant Hole Openers with 24-24-16 jet sizes were used to open the hole from 12-1/4 inch to 12-1/2 inch. The pump rate averaged 496 gpm at 750 psi.

March 24 - April 14, 1981

Seven Grant Hole Openers with predominately three 18's and three 16's jet sizes were used to open the 17-1/2 inch hole to 26 inches. Pump rate was maintained at approximately 496 gpm at 950 psi. This section took 22 days to complete, including five days retrieving a lost cone from NB #11.

April 15 - April 18, 1981

At 2,095 feet the 20 inch intermediate casing was set. The four days included running casing, cementing, waiting on cement and nippling up.

INTERVAL: 2,118 to 3,680 Feet

April 19 - April 29, 1981

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Below the intermediate casing, a 12-1/4 inch hole was drilled. For this section, from 2,118 to 3,680 feet, four bits were used, two J33's and two F3's. Jet sizes were mainly 12-12-12 with the pump rate of 520 gpm at 1900 psi. Average penetration rate was 8.8 ft/hr using an average 20,000 WOB and 60/70 RPM. The mud was changed to a lime/gel system without filtration control. The formation was mainly a limestone which was fractured in places, causing lost circulation. Two hundred barrels were lost at 2,344 feet with gradual losses of 60 barrels an hour to 2,472 feet. Mica and walnut hulls were added to plug the fractures.

Five washouts occurred in this section, four joints of 5 inch drill pipe, and one 9 inch drill collar.

INTERVAL: 3,680 to 6,000 Feet

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April 30 - May 23, 1981

Using eight bits, mainly J33, F3 and F4, this section of the 12-1/4 inch hole was drilled in 24 days at an average penetration rate of 6.1 ft/hr. WOB was 18-20,000 to 4,951 feet. At that point, a slight increase in deviation occurred, from 2-2-1/2 degrees, necessitating a reduction of WOB to 10,000. The RPM's remained between 60-70. Jet sizes were predominately 12-12-12 with a pump rate of 490 gpm at 2180 psi.

Two cores were attempted, one at 4,050 feet, the other at 5,473 feet. No core was recovered at 4,050 feet, and a six foot core was recovered at 5,473 feet. Both core bits were Christensen 8-3/4 inch MC 23.

Mud weights remained at 8.8-8.9 ppg. DRISPAC was added to control filtration and caustic soda added to control pH. Filtration levels were maintained at 16-18 and pH at 10.5-10.8. With the low mud weights, lost circulation caused by formation breakdown was not a problem. However, naturally occurring fractures sometimes did appear and made it necessary to add LCM. At 4,780 feet, 60 barrels of mud were lost in fractured granite.

This section had seven washouts. Five were in the 5 inch drill pipe, one in the 9 inch drill collar, and one in the teledrift tool. No time was lost for fishing, since all washouts were caught in time.

From 3,680 to 6,000 feet, the formation was entirely igneous, presumably overthrust in nature.

INTERVAL: 6,000 to 8,355 Feet

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May 24 to June 30, 1981

Using ten bits, mostly F3, F4, F5's this section was drilled in 38 days. Average penetration was 3.8 ft/hr for the section. Average WOB varied depending upon deviation. From 6,000 to 7,130 feet, WOB averaged 20,000. From 7,130 to 8,365 feet, WOB averaged 15,000. RPM was essentially 60 most of the section. Pump rates averaged 495 gpm at 2150 psi using 12-12-13 size jets.

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Mud weights rose slightly to 9.1 ppg because of excess solids in the mud. FLOSAL was added to the mud instead of DRISPAC. Filtration levels were maintained between 14.0 to 16.0. The pH levels were from 10.2 to 10.8.

Besides the ten bits, three core bits were run in this section. Core bit #28 ran from 6,061 to 6,092 feet, recovering 30 feet. RR #28 ran from 6,503 to 6,522 feet, recovering 15 feet of core. Core Bit #38 ran from 8,180 to 8,186 feet, recovering 6 feet of core. All three core bits were 8-3/4 inch Christensen MC 23's.

Washouts were still a problem in this section, though to a lesser degree in the drill pipe. Grade G type drill pipe was found just above the heavy wall pipe. After being replaced by Type E, washouts of the drill pipe were minimized. Two 9 inch drill collars were found to be defective and NB 31 and NB 34 had jets which were washed out. NB 35 was run 19.1 hours and had to be pulled because of a washout in a weld on the bit itself. One joint of heavy wall drill pipe and two joints of 5 inch drill pipe were replaced.

INTERVAL: 6,000 to 8,355 Feet (Continued)

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Deviation started to become a problem in this section. Starting from 1-3/4 degrees at 6,049 feet, the deviation rose slowly until 7,107 feet where it went from 2-1/4 degrees to 3-1/2 degrees. From there deviation remained at 3-1/2 degrees until 8,180 feet where deviation increased to 4-3/4 degrees. By 8,302 feet, the deviation was 5 degrees. (Refer to Deviation Table.)

With an increase in deviation, the torque increased. From a low value of 170 amps at 6,000 feet, the torque increased to 280 amps by 8,139 feet. At 8,139 feet, while running in NB 39, the pipe was stuck and then freed, and then stuck again, three stands off bottom. Fortunately, although the jars failed to operate, the pipe was unstuck and drilling was resumed after a few hours.

Lithology for this section consisted of siltstones with sandstone and traces of limestone. A great deal of sloughing occurred while drilling this section. A 30% increase in lag time was calculated by comparison of the carbide lag to the annular volume of a 12-1/4 inch hole.

INTERVAL: 8,355 to 10,561 Feet

July I to August 7, 1981

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This section used 16 bits, mostly F4's and F5's, to drill from 8,355 to 10,56l feet in 38 days. Also used were two core bits, NB 45 and NB 46, from 8,837 to 8,844 feet, recovering 7-1/2 feet. Penetration rate for this section averaged 4.0 ft/hr. WOB values were 10-15,000 from 8,355 to 9,524 feet. From 9,524 to 10,56l feet, WOB was increased with a reduction in deviation, to an average of 30,000. RPM was 55-65. Pump rate was 489 gpm at 2,210 psi, using 12-12-13 jet sizes.

Because of an increase in devaition, 5 degrees at 8,298 feet, a dyna drill was used with NB #40. Also used were NB #41, 42, and 43 to a depth of 8,667 feet. WOB was reduced to 10,000 and RPM increased to 350 by use of the mud turbine. Pump rate was 395 gpm at 900 psi using 20-20-20 jet sizes. By 8,667 feet, deviation had been reduced to 4 degrees and dyna drilling was discontinued. At 8,985 feet, however, deviation had increased to 5 degrees, necessitating the use of the dyna drill again. From 9,008 to 9,186 feet, RR 48, NB 49 and NB 50 were used in an effort to correct the deviation. By 9,186 feet, the deviation was reduced to 3-3/4 inches, and normal drilling was resumed to Total Depth. (Refer to Deviation Tables.)

The mud weight in this section was maintained at 9.0 ppg. DRISPAC was used instead of FLOSAL, with caustic soda being used to control pH. Filtration levels averaged between 15-18, with the pH level maintained at between 10.4 to 11.0.

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# INTERVAL: 8,355 to 10,561 Feet (Continued)

Trips for washouts were greatly reduced in this section. Only one trip for a washed out drill pipe occurred, at 8,837 feet. At 8,988 feet, tripped for washout in NB #47, F4. Then at 10,452 feet, tripped out of hole for a washout in the jars.

Lithology in this section was mainly a siltstone. Sandstone was present in slightly smaller quantities, with dolomite appearing between 8,750 to 9,200 feet. No shows appeared in this section.

August 8 to August 9

Spent two days E logging this section. Caliper lag showed large areas in excess of 16 inches. (Refer to Caliper Chart.)

INTERVAL: 2,095 to 7,558 Feet

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August 10 to September 14, 1981

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Using 15 Grant Hole Openers, this section was opened up from 12-1/4 inch to 17-1/2 inch in 36 days. At 7,558 feet, the drilling operation ceased and the well was plugged and abandoned. A possible reason for this action was the amount of junk which had accumulated in the hole. NB #61 lost the 12-1/4 inch pilot bit, NB #67 lost two cutters, and finally NB #74 was missing the bottom half of the hole opener. To continue hole opening would probably have necessitated plugging back and whip-stocking around the offending metal, an action which would have been very costly and time consuming.

PORE PRESSURE AND FRACTURE GRADIENT PREDICTION

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While drilling, a variety of methods are used to give some indication of changes in pore pressure within a formation prior to electric logging. In any given situation one technique may be more accurate or dependable than another but when all are taken into consideration in the final evaluation, deviations from a normal pressure gradient can be detected.

The modified "d" exponent is one method used in detecting abnormal pore pressure. Derived from a drill rate equation, the "d" exponent is a dimensionless number which normalizes the effects of bit weight, rotary speed, bit diameter and mud weight. When plotted versus the depth, a normal trend line is quickly established and deviations from this trend line indicte abnormally pressured zones. This is extremely useful when drilling with a balanced system in that needed increases in mud weight are indicated prior to formation fluids or gases reaching the surface.

Delta T or the change in the temperature of the drilling mud as it makes one circulation through the hole is another useful method of detecting changes in pore pressure. When allowances are made for outside air temperature and pump downtime, increases in pore pressure are often reflected by an increase in delta T. This is due primarily to the insulating properties of highly porous formations as compared to less porous zones.

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Connection and trip gas and their relation to surge and swab pressures are useful indicators of changes in pore pressure. As the hole approaches a balanced condition with the drilling mud, increases in the amount of trip and connection gas would indicate an increase in pore pressure.

Delta chlorides, obtained through the measurement of conductivity of the mud at the suction line and flow line is also a useful indicator of changes in pore pressure. For Delta chlorides to be of value, the assumption must be made that there would be a corresponding influx of fresh or salt water into the borehole with an increase in pore pressure. Mud additives must also be closely monitored.

Mud density, measured with sensors at the flowline and suction can also indicate changes in pore pressure. Gas cut mud would show up having a lower density at the flowline while losses of fluid to a subnormally pressured zone would cause the weight to increase in most cases.

Conclusions drawn from the indicators above can often be reinforced by observations made of the pit volume, standpipe pressure, torque indicator and changes in drill rate.

Due to the lack of information on fracture gradients in the Arizona area the Eaton Method was used in predicting fracture gradient on Phillips Tombstone State.

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#### RECOMMENDATIONS

- 1. The caliper log indicated that large amounts of sloughing occurred in the 2,095 to 10,56l feet section of the hole. In large part this could be a result of having kept the annular drill pipe sections in turbulent flow for the entire well. Though keeping drill collars in laminar flow is ideal, this usually results in poor hole cleaning, definitely not recommended. However, laminar flow can usually be obtained opposite drill pipe sections.
- With considerations for hole stability and casing tensile strength, increase the depth of the intermediate casing seat. This may enable drilling to reach total depth without the need for an additional liner below the intermediate casing point.
- 3. Control mud solids content more strictly. The use of a company specializing in solids control should be considered. This would reduce the number of problems we experienced with washed out jets and drill pipe.
- 4. Perform leak-off test at each casing seat in order to establish mud weight limits in the event pressures are encountered later on.

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	Degrees	Degrees	Feet Interval
Depth 224'	Deviation 3/4	Difference 0	224
418'	.3/4	0	194
5441	3/4	0	126
62 <i>4</i> 1	3/4	0	80
698'	. 3/4	0	74
780'	3/4	0	82
818'	3/4	0	38
902'	1	+1/4	84
1,020'	l	0	118
1,186'	3/4	-1/4	166
1,269'	3/4	0	83
1,334'	3/4	0	65
1,404'	1/2	-1/4	70
1,494'	1	+1/2	90
1,576'	3/4	-1/4	82
1,641	1	1/4	65
1,700	3/4	-1/4	59
1,758'	1	+1/4	58
1,820'	1	0	62
1,941'	I	0	121
2,003'	3/4	-1/4	62
2,158'	1	+1/4	155
2,218'	1/2	-1/2	60
2,282'	1/2	0	64
2,3441	1/2	0	62
2,373'	1/2	- <b>0</b>	29
2,404'	1/2	0	31
2,463'	1/2	0	59
2,495	1/2	0	32
2,525	1/2	0	30
2,555'	1/2	0	30
2,617'	1/2	0	62
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CHEST STREET

# **DEVIATION SURVEYS**

	Degrees	Degrees	Feet Interval
Depth 2,649'	Deviation 1/2	<u>Difference</u> 0	32
2,680'	.1/2	0	31
2,711'	1/2	0	31
2,742'	1/2	0	31
2,771'	: 1/2	0	29
2,788'	1/2	0	17
2,834'	1/2	0	46
2,862'	1/2	0	28
2,954	1/2	0	92
3,023	1/2	0	69
3,045'	1/2	0	22
3,080'	1/2	0	35
3,110'	1	1/2	30
3,140'	`1	. 0	30
3,172'	1/2	-1/2	32
3,232'	1/2	0	60
3,264	1/2	0	32
3,294'	1/2	0	30
3,324'	1/2	0	30
3,356'	1/2	0	32
3,388'	1/2	0	32
3,418'	1/2	0	30
3,446'	1	+1/2	· 28
3,478'	1/2	-1/2	32
3,540'	1	+1/2	62
3,570'	1/2	-1/2	30
3,628'	1-1/2	+1	58
3,656'	1	-1/2	28
3,718'	1/2	-1/2	62
3,7841	1/2	0	66
3,810'	1/2	٥	26
3,840'	1/2	0	30
- /		10	

m .1	Degrees	Degrees Difference	Feet Interval
Depth 3,872'	Deviation 1/2	0	32
3,900'	. 1	+1/2	28
3,932'	1/2	-1/2	32
3,964	1/2	0	32
4,026'	÷ 1/2	C	62
4,120°	1/2	0	94
4,150'	3/4	+1/4	30
4,210'	i	+1/4	60
4,240'	1	. 0	30
4,272'	1	0	32
4,334'	1/2	-1/2	62
4,394'	1	+1/2	60
4,4241	1-1/2	+1/2	30
4,456'	I	-1/2	32
4,486'	1-1/2	+1/2	30
4,520	1-1/2	0	34
4,550	1-1/2	0	30
4,580	2	+1/2	30
4,612	2	0	32
4,641	2	. 0	29
4,702'	2-1/2	+1/2	61
4,732'	1-1/2	-l	30
4,762'	2-1/2	+1	30
4,792	2-1/2	0	30
4,826	2-1/2	0	34
4,8561	.2	-1/2	30
4,888'	2-1/2	+1/2	32
4,9191	3	+1/2	31
4,954	2-1/2	-1/2	35
4,982'	3	+1/2	28
5,040'	1-1/2	-1-1/2	· 58
5,0721	1-1/2	0	32

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Depth	Degrees Deviation 1-1/2	Degrees Difference 0	Feet Interval 36
5,108'	1-1/2	0	56
5,164'	1-1/2	0	26
5,190'	2-1/4	+3/4	36
5,226'	2-1/4	0	38
5,264'		-1/2	<b>2</b> 6
5,290' 5,320'	2 2	0	30
5,374	3	+1	54
5,441'	1-1/2	-1-1/2	67
5,5341	1	-1/2	93
5,556'	<sup>3</sup> 1	·· 0	22
5,596'	2-1/2	+1-1/2	40
5,626'	I	-1-1/2	30
<b>5,</b> 658'	1	0	32
5,688'	1-3/4	+3/4	30
5,720'	3	+1-1/4	32
<b>5,</b> 750'	1-3/4	-1-1/4	30
5,780	1	-3/4	30
5,812'	1-1/2	+1/2	32
5,870'	2-1/2	+1	58
5,900'	1-1/2	-1	30
5,994'	1-3/4	+1/4	94
6,149'	1-1/2	-1/4	155
6,239'	2	+1/2	90
6,314	2	0	75
6,436'	1	-1	122
6,678'	1-3/4	+3/4	242
6,738'	1-1/2	-1/2	60
6,830'	2	+1/2	. 92
6,924	2-1/4	+1/4	94
7,044	3	+3/4	120
7,106'	3-1/2	+1/2	62

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		_	Foot		
	Degrees	Degrees Difference	Feet Interval		
Depth 7,170'	Deviation 4	+1/2	64		
7,2321	3-1/2	-1/2	62		
7,299'	4	+1/2	67		
7,368'	3-1/4	-3/4	69		
7,415	3-1/2	+1/4	47		
7,444	3-1/2	0	29		
7,508'	3-1/4	0	64		
7,536¹	3-1/2	+1/4	28		
7,622	3-1/2	0	86		
7,780'	, <b>4</b>	<sub></sub> +1/2	158		
7,810'	4	0	30		
7,870'	4	0	60		
8,056'	3-3/4	-1/4	186		
8,120'	4	+1/4	64		
8,1701	4-3/4	+3/4	50		
8,240'	4-3/4	0	80		
8,298'	5	+1/4	48		
8,361'	4-3/4	-1/4	63		
8,414'	5	+1/4	53		
8,454'	4	-i	40		
8,490'	4	0	36		
8,518'	3-3/4	-1/4	28		
8,546'	4-3/4	+1	28		
8,578'	4	-3/4	32		
8,606'	3-3/4	-1/4	28 32 29		
8,638'	3-3/4	0			
8,667'	3-3/4	0			
8,704'	4	+1/4	37		
8,736'	3-1/2	-1/2	32		
8,766'	3-3/4	+1/4	30		
8,797'	3-3/4	0	31		
8.830'	4	+1/4	33		

( COMMENTS

Denth	Degrees Deviation	Degrees Difference	Feet Interval
Depth 8,860'	4	0	30
8,9531	4_3/4	+3/4	. 93
8,98 <i>5</i> ¹	5	+1/4	32
9,154'	. 5	0	169
9,185	3-3/4	-1-1/4	31
9,2241	3-3/4	0	39
9,256'	3-1/2	-1/4	32
<b>9,</b> 287'	4	+1/2	31
9,317'	4	0	30
9,348'	4	0	31
9,365	4	0	17
9,411'	_ 3-1/2	-1/2	46
9,4411	3	-1/2	30
9,507'	3	0	66
9,522'	2-3/4	-1/4	15
9,570'	2-3/4	0	48
9,6341	3	+1/4	64
9,696'	2-1/2	-1/2	62
9 <b>,</b> 759'	3	+1/2	63
9,781'	3	0	22
9,823'	2-1/2	-1/2	42
9,885'	2-1/4	-1/4	62
9,948'	2-1/4	0	63
9,9921	2-1/4	0	44
10,050	2	-1/4	58
10,113'	1-3/4	-1/4	63
10,175'	1-3/4	0	62
10,237'	1-3/4	0	62
10,301'	2-1/4	+1/2	64
10,332'	2-1/4	0	31
10,394'	2	-1/4	62
10,456'	1-3/4	-1/4	62
10,518'	1-3/4	0	62

HOLE DIAMETER CHART

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Results From Caliper Log of Drilled 12-1/4 inch Hole

HOLE LESS THAN 16 INCH DIAMETER 5170 - 5230 (60) 2095 - 5170 (3075)  5400 - 5550 (150) 5230 - 5400 (170)  5660 - 5900 (240) 5550 - 5660 (110)  6080 - 6450 (370) 5900 - 6080 (180)  6530 - 6880 (350) 6450 - 6530 (80)  7050 - 7120 (70) 6880 - 7050 (170)  7150 - 7240 (90) 7120 - 7150 (30)  7410 - 7770 (360) 7240 - 7410 (170)  7850 - 8340 (490) 7770 - 7850 (80)  8430 - 8590 (160) 8340 - 8430 (90)  8640 - 8770 (130) 8590 - 8640 (50)  8840 - 8910 (70) 8770 - 8840 (70)  8950 - 9160 (210) 8910 - 8950 (40)  9180 - TD (1381) TOTAL 4335	•	•		
5660 - 5900       (240)       5550 - 5660       (110)         6080 - 6450       (370)       5900 - 6080       (180)         6530 - 6880       (350)       6450 - 6530       (80)         7050 - 7120       (70)       6880 - 7050       (170)         7150 - 7240       (90)       7120 - 7150       (30)         7410 - 7770       (360)       7240 - 7410       (170)         7850 - 8340       (490)       7770 - 7850       (80)         8430 - 8590       (160)       8340 - 8430       (90)         8640 - 8770       (130)       8590 - 8640       (50)         8840 - 8910       (70)       8770 - 8840       (70)         8950 - 9160       (210)       8910 - 8950       (40)         9180 - TD       (1381)       9160 - 9180       (20)	= =			IAN 16 INCH DIAMETER (3075)
5660 - 5900       (240)       5550 - 5660       (110)         6080 - 6450       (370)       5900 - 6080       (180)         6530 - 6880       (350)       6450 - 6530       (80)         7050 - 7120       (70)       6880 - 7050       (170)         7150 - 7240       (90)       7120 - 7150       (30)         7410 - 7770       (360)       7240 - 7410       (170)         7850 - 8340       (490)       7770 - 7850       (80)         8430 - 8590       (160)       8340 - 8430       (90)         8640 - 8770       (130)       8590 - 8640       (50)         8840 - 8910       (70)       8770 - 8840       (70)         8950 - 9160       (210)       8910 - 8950       (40)         9180 - TD       (1381)       9160 - 9180       (20)	5400 - 5550	(150)-	5230 - 5400	(170)
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7410 - 7770       (360)       7240 - 7410       (170)         7850 - 8340       (490)       7770 - 7850       (80)         8430 - 8590       (160)       8340 - 8430       (90)         8640 - 8770       (130)       8590 - 8640       (50)         8840 - 8910       (70)       8770 - 8840       (70)         8950 - 9160       (210)       8910 - 8950       (40)         9180 - TD       (1381)       9160 - 9180       (20)		(90)	7120 - 7150	(30)
7850 - 8340 (490) 7770 - 7850 (80) 8430 - 8590 (160) 8340 - 8430 (90) 8640 - 8770 (130) 8590 - 8640 (50) 8840 - 8910 (70) 8770 - 8840 (70) 8950 - 9160 (210) 8910 - 8950 (40) 9180 - TD (1381) 9160 - 9180 (20)	•	(360)	7240 - 7410	(170)
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9180 - TD (1381) 9160 - 9180 (20)	•		8910 - 8950	(40)
TOTAL 4131 TOTAL 4335		•	9160 - 9180	(20)
	TOTAL	4131	TOTAL	4335

· ( Baroid Losging Systems HTSEC DATE \_5/35/8/ . APPLIED DRILLING TECHNOLOGY OPERATION \_ DRICKING TIME FCOTAGE MORNING REPORT WELL NAME Junes Tomestone State "H" Not \_\_\_\_ FIELD BLOCK \_ WILLEAST THILLIPS PERMILEUM OFERATOR CO PARISH \_\_\_(Xuite. 2 PARKER DRILLING CONTRACTOR STATE STARTING DATE \_3/8/8/ LOGGING DATA H,S SAS (ppm) (mqq) funits? LINCOTONE, SAUSTONE \_\_ DRILL BATE minrit [] LITHOLOGY BACKGROUND C COPR. "D" EXP. TRIP CHLORIDES \_\_\_\_\_ CONNECTION SHALE DENSITY LAG DOWN DP DELTA CL LAG OFF BOTTOM \_\_\_\_\_/2,307 FLOWLINE TEMP FORMATION PRESSURE DATA AND A SERVICE OF THE PROPERTY OF THE P CASING SEAT 3JUH MOTTOB \_\_ppg \_\_**2655** \_\_psi \_ \_\_**23** \_\_ppg \_ 55: \_\_\_ PORE PRESSURE ppg \_\_**483**/ \_\_\_ psi \_/350 \_\_ psi \_/84 \_\_ pogs ps1 \_\_\_ FRACTURE PRESSURE ppg psi \_\_\_ psi \_\_ HYDRAULIC DATA **SIT DATA** ATAC DUM Jaires 2 Inires ... FUMP .29 ON TIB TIME SIZE n. GU- FLOSAL- DRISPOR TYPE TYPE CAPACITY galistik SIZE WEIGHT in-out PUMP RATE SIK min \_11,14,12. JETS FUNNEL VIS. 486 FLOW RATE galimin DEPTH out PV YP PRESSURE psi 1150\_ 13.5. BOT HBS. GELS PD SURF psi \_35 \_61\_\_ FOOTAGE 316 2/27 AV, ET, HR \_\_\_ 5.0 DS psi FILT CAKE API X \_5\_ AtiN psi GRADED T-B начнт 🗀 1741 BIT psi GAUGE JET VELOCITY ft sec 2° Q LIYE 47Z HOLE DEV. PEMI \_\_151.10 JET RAPACT to 1046 COST.FT CHLORIDES pom BIT HP 447 15. WOB CALCIUM ppm HP RATIO 31.70 RPM SOLIDS REDUCED REMARKS 0 PUMP psiat 455 31.083 DAILY/CUMUL. COST ANNULUS DATA CRIT-VEL FT/MIN SLIP-VEL FT/MIN VELOCITY FT/MIN VOLUME BOLIFT. LENGTH - FT DP.CSG \_\_\_ مر 2095 \_5.0 \_\_\_ DP/HOLE 1315 3315 \_\_ DC/ DC/ \_t.o.\_\_\_ DC/HOLE PIPE DATA LONG LRVER DRILL STRING CASING: SURF THE Ð DC DP \_\_\_30.5 9.0. 5.75 OD INCHES \_\_\_18.75 ID-INCHES \_\_\_3405 \_\_\_\_0080 .0087 CAP-BBLIFT. \_\_.016 \_\_\_\_0241 \_ 5065 ,0100 DISP-BBL FT. <u> 49. \_\_\_3045</u> 286 \_\_54/0 \_ LENGTH-FT. 457 112 \_\_\_/4.5\_ WEIGHT-LS FT. RECOMMENDATIONS IMPACT FORCE HYDRAULIC HP PIPE SPEED 🚨 CSG SPEED [ JETS MUD WEIGHT gan garaga sa kang pendamban sabit s در او بخورگئیدورگ - RECOVER 4-30 FT CORE SAMPLE AND RILL W/ MB 29, REAM 50' TO BORDOM - AST SULVESCUTE TO FOR PARTICLE MAMETER ALL INCH IN SAFACE CASING - NERAGE TORQUES LTO HAPS THIS TIT RUN - CONTINUED HIGH PERCENTEGE GRANITE IN SAMPLE MAY INDICATE SCOUGHING PROBLEM, BOTTOMS UP TIME IS ALSO GREATER THAN IT SHOULD BE FOR R 1214" HOLE

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27 ₹ 14,000 DAYS 1 COMMENTS & DRILLING HAZARDS OPEN HOLE 12/4 - 17/2 -- OPEN HOLE 12/4" - 26 11111

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Ιž	COUNTY	1	STATE	475		11.7	FIELD	SEC /H	711P	A110	\ \u	LOCATION PAPLLIPS	LOCATION PHILLIPS TEMBSTONE STATE	75 mas 7	370	27476	/ * - # /		·	į
18	COUPACTOR	/SE or	OPE	PERATOR		98	SPUD	UNDER	SURF UNDER INT	\$	20116	nuor	17 83	VER U	YDEA	LINEA	G IIH)81	UNDER LINER UNDER LINER REACHED TO		•
Z	PAAKER DRUG.	DREG.	7/Kd	PALLIPS PETROLEUM	みゅんぎゅか	<u>س</u>	3/8/8/	40	260%	-	-	_	-	+		- i	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1000		
0%	3778	TYPE	JET	DEPTH	FEET	HOURS	FF 118 01	HOURS HR DRLG HRS THE	HOURLY COST	COST FT YOU		d HdH	PULP 6211		T B G	1 1	DEV WT	32	REMARKS	٠
	1a //∉	STC 06J	7 2 2	432	342	32.5	<i>i</i> i.3	32.5	550.		71/01	90/	4 006	60%	9	4		7 66		
~	12/4	87C SD6H	7 70 70	707	270	34.5	9:	57.0	550		51/01	991	4 006	9 684	9	Ч		4.8		
m	12.14	STC F3	تر تز تا	1475	876	65.75	-2	144.75	550	80.8	9	15/90	3006	484	7	**	·	>- 84		
7	1214	HTC 533	222	1982	205	62.0	2.4	189.75	550	78.9	٥	25	906	41.6				2.5		
KRB	12%	STC F3	PPA	2118	967.	42.0	25.0	276.75	550	13451	9	25	006	68/1				25.	17/1 1 HAY 76 17/1"	•
15	12%	GRANT	表記	1514	haht	29.0		345,25	550.	·	13/15	SS	200	22%				۲. ک		Cu
1 3	12%	GAANT	₹ <b>₹</b> :	2007	493	31.25	3,5	277.50	250		10/20	ę,	200	29#				75		
1 ~	17%	ShANT	* * * * *	cille	110	71.0	70.	2885	550		٥٤/٤١	Sp	750	775				ا مع	1	
00	3	GRAUT .	ন্ম্	303	232	34.35 6.7	2:9	323.25	250		Sifai	દ	Sob	776				٥ که	ODEN 17/14 HOLG TO 26.	
6	3,6	GRANT	30 pr 00	509	209	42.0	Ь Э <sup>2</sup>	370,25	530		10/20	S, S,	200	27/1				7.5		
2	72	GRANT	334 524	Lhol	538	\$3.25	 pi	453.5	550		10/40	2	25.	795	To .	4 H		8.5		
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ELL 110.	1 0311:	18/41/6	6113	32	3	9	8.6	6.8	9.0	6.9	96.7	2	3.	3	- 64	·	C. C.
WELL NO. A - W!	REAG	6	103/	05V W7			-					**	***	15.	*	]	
37.	LINER		ł	11			H	14	77		Н	<u>*</u>	3	130	н		
78 57	1050		13	0 8			7 7	9	3		30	<u>لم</u>	7	ار او	200 1		
185724	111 00	5		) h	775	797	777	7 295	h 29h	77.6	773	68.4	489	687	21.2		
COCATION DIJLINGS TOMBSTOWNE STATE	3	Š.	H	72 63	<del></del>	7000	h 000/		1300 4	h 0011	5 008/	1900 5	400/	2000	0 60		
LOCATION PHILLIPS	30,0	ושחצו	F	RPM PRES GPM	200	8	50 10	0011 octas	60 /3	11 59	2/ 0/2	20	20 11	2 2			
	15	2	- 6		20		10/40 5	T I	9 02/01	0/0/20 6	<del></del>	20 %	20	20	0.7		
7.6 23€		7 H 7	-	1,70	04/01	0	/0/	°€	<u>*</u>		9		T i		~		
RNG		7	-	057 /	-						258.5	77.0	\$3.3	63.6			2
71%P 205		UNDER IN	22.5	TRIP HOURLY	550.	550	550	දි	530	SSO	550	089	850	350	SSBD		
		SURF		TRIP												<del></del>	
SEC		UNDER	7,	ACCUM OALG HRS	504.5	s.hos	534.45	562,25	05.507	52.067	672.50	SC.15¢	855.0	F96.75	196.5		
CIELD		SPUD 2/4/41		7.2	. j.	٥	7.3	3.7.	4.8	3.9	1,3	2.4	2.5	<u>ሩ</u>	<u>a</u>		
F151.D	i   	SPUD	5	HOURS HR	57.0	0	39.75	25.0	42.25	60.75	7.45	24.28	93.25 7.8	کر,۱۲	2:2		
		901 61100	HOLE CAN	FEET	412	0	. h8	hol	222	ورجه	ъ	603	129	467	-		× 600
7.6	שלים ויאנ	OPERATOR	לאים גבו	DEPTH OUT	65hí	1459	£43/	<b>Ch11</b>	4081	21/16.	2121	2284	3583	40Se	1504	<u> </u>	
STATE	`	OPE		757	72 57 72 57 73 57 73 57	1	32 37	222	7 7 7 2 6 6 7	8/ E/	4 4 4	444	= 40	도근건		· 	
	49	<i>y</i> .		TYPE	GRANT	SEC H3J	GRANT	GEANT	. GRANT	GRAUT	STC F3	HTC 533	STC F3	H7c J33	CHES. MC 23		alle, tr
7.7	COCH/56	CONTRACTOR		SIZE	27	17/4	26	3¢	34	3,5	12/14	ייייגו	121/4	با( <i>ب</i> دا	₩c 3•		
COUNTY	J	LNOS	Ē	0,2		ď	8810	30	5	3.	72	2	2	2	g		A Tringer
				५० क्यू	tengijajiiri	ng palana Tan		horred -	n i i i Protestas Si el	n elektristeri Antonio		a kalilika ( Tippininga Jis ditu.		gerennen.	77.02-1-17		
														30.593.03			

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`	0.		REWARKS					ROSH FOR CARE DARREL	Retrieved 6' cone			POOU FOR CONG BARAGE	RETRIEVED, 30' CORE		<u> </u>
	CHED	18/4//6	# 100 # 100	6.9	3	6.3	8.9	9	20.9	8.6	6.9	30	89	0,6	k
MELL MG.	REAL	7	DEV WT				-				.**	-	<u> </u>		h
are.	LINEA		1 1	32	250	7	7	Н	4	H	7	7	1	H	
u6 57	NOER		F B G	70	٠ ١	<i>∞</i>	৸	r r	30	لم	7	α	~	<b>h</b>	
musto	158 11			2	489	48.4	684	68%	23.		4.83	444	489	473	
LOCATION PHILIPS TOMOSTONG STATE	177 8	ł	PULL GPLI	2000	2200 4	4 0522	2300 4	2300	2	2200 489	2200	2150		7150	
LOCATION 7	UNDE		APN PA	0 0	. 2	2 2	709	0	35	07	60,	<u>ه</u> در		0,	
	21/07				51/01	51/61	21/01	10/20	0 %	81	20	کڑ	92	لې	
R110	T UNDER		OST FT IY	35.5	113	Hor	155	346		155	05/	/32		/35./	
7147	SURF UNDER INT UNDER LONG UNDER LINER UNDER LINER REACHED TO	2095	TRIP HOURLY COST FT WOD	. 625g	. 055	550	350	550	550	ssp	\$50	SSO	SSo	550	
-	URFU	<u></u>	TRIP !			-									
SEC	JANDER	, 0	ACCUN RLG HRS	<u> </u>	1027.75	1059.75	26.1811	1/39.75	54.4411	36:5611	1239,5	1273.	1381	134225	
FIELD	101	3/8/81	7.4	2.4	225	3.9	3- 3- 3-	3.7	۲,	4,7	6.7	:   2			
FIE	Olida	, <sub>(1)</sub>	HOURS	25.25	2%	6,1%	63.0	18.0	5.0	3,0	43.35	2	3	86.38	
		LEUM		T -	hoh	/25	220	87	3	02.40	212	, 9.0	2	410	
3.	שאודמא	OPERALOR PAILLIPS PETROLEUM	DEPTH	7074	50,0	5/35	SABS	5473	5429	5675	23.53		3	6633	<u> </u>
STATE	100	O TOTAL	14.7	2 2	444	244	44	255		==	र द द	4 4	<u> </u>	444	
	SE	ج. رئ	4 4 5 5	HTC 533	STC. FY	HTC 533	STC F3		CHOIS MC 33		אור אסט	<u>.  </u>	STC F4	STC F3	
12	COCHISE	CONTRACTOR DADYER DAIG.		37.75	אאנו	א/,בו	12 1/2	13,12	3.4		*/*/	١/٨	12/4	7/2 1	
COUNTY		CON7			्री न्	- 1	1 3					2	22	30 G	

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111 . WELL NO.	MILLIPS TEMPSTONE STITE NO TO TO THE MEACHED TO	18/4//6	S GPM T B G DEV WY	484	16 3 5 18 91	949 6 5 1/4 9.4	0 429 5 5 8 312 9.1	0 489 4 3 14 314 9.1	0 489 8 8 1/2 30 9.0 .	0 489 30 9:0 Dit washed Edward wald	0 489 6 5 7 34, 9.0	· 0 484 9.0	0 484 40 CARE	10 489 5 5 1/2 43/ 8.9	
LOCATION	Samuel Sur	מאס סיייס	APM PRES GPM	20 //00	60 2250	0 40 2000	60 2000	60 2000	0 60 2150	0 60 2390	40 4150	0 65 2150	50. 2150	5. 6.5. 2100	121
RHG	736	UNDER INT UNDER LUNG 2095'	TRIP HOURLY COST FT WOB	75.50. 21x	123.5 30	143 15/20	252 /2	23/ 15	201 20	1140 20	788 15	140.9 20	25.	287.7 15.	
7.17.2	20%	TONDER IN	P HOURLY	570	250	. 550	550	SSO	\$50	. Sso	920	SSo	\$50	\$50	
75	//	UNDER SURF	5	1322.50	1446.75	1517, 25	1592.75	1666,0	1751.25	253.75	1818.50	1862.50	1869.50	1943.25	
FIELD	WILDCAT	3/8/8/	HOURS HR DRLG HR	6.1 21.01	69.25 4.6	20.5 2.2	25.5 3.2	73.25 4.6	85.25 2.9	2.5 4.0	64.75 2.5	7:5 a.44	8.0	22.55 A.S	
		<b>EU</b> ላ			318 6	360	182 3	681	253	0~	151	249	3.0	34	
	ARIZONA	OPERATOR PIKUPS PETANEUM	DEPTH	KE59	0487	2136	\$160	2502	2260.	7770	793)	3/80	2187	836.5	
STATE	Ą	0.P.E.	730		444	457	= 4 ¥	525	<b>ゴイン</b>	₹ 2 :	4 4 4 5	4= =	Hue *	745	:
	ħ,	JRLG.	TYPE	CAUS MC 23	STC.F4	STC FY	HTC 344	HTC 3 44	STC F4	STC FS	STC' FS	STC FY .	CHAIS MC 23	STC FS	
17.	COCHISE	CONTRACTOR	10 SIZE		17,17	13 %	13%	17,21	<i>₩</i> ,₹/	12%		12.14	8 3/4	7, 21	ļ
COUNTY	v	CON	0,7	Read	2	3	ď	ಜ	46	73	200	32	38	5	1

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	0.0		REMARKS	DYNA DRICL	Dyna part	DYNA DRILL	which out	CORE - RETRUEVE d"	CORE. RETURNE 31	Dit washed through weld	Weshert	Dias Deice	DYNA DRILL	DYNA DEILL		
5.	9   14   8	1000	1 £	a.6	0 6	0.6	9.0	0,	9.0	9.0	8	0 6	9.0	ę. 0	0.6	
WELL 10. A ₹1	9/1	100	05V WT	. 5	3%.	3%	*	2	*	ر	દ	3-				
7976	TILLER	Į.	1 1	37	2%	72	37		·	200		>,**	22	**		
3.0	VDER		T B G	*0	<u>ы</u> Ь	20	7			<del>ال</del> ا		20	20	5		
10570	IER UI	+		396	365	3%6	5 6,8%	758	726	654	484	294	19/1	3	£ 2	
LOCATION STATE	W 71V	+	200	975 3	925- 39	875 3	4000	400	4006	2150	4 25.4	, 05//			2200	
LOCATION PHILLIPS	UNDE	$\perp$	APM PRES GPM	ئىرى:	5/2 9.	35,000	57	25	52	77	73	: 1	43	35. 1000	15	
	2007	-	-	3/2	24	3/6	5/	٠ ۲	9	6,7	, 0	2	7	٠,	<u>,</u>	
RNG 03 E	12	_	SOST FT IV	339.4 /	3.4.6	284.3	243.9			255	905	426	285	335		
71179	UNDER INT	C LAW	TRIP HOURLY COST FT HOB	£550.	SSo	550	550	SS	SSē	550	SSD	SSD	550	550	250	
	SURF	1	THE			•										
SEC	UNDER	_	HOURS HR DRLG HRS	1983.25	2006.75	کد ,(30 هر	2101.0	2106.	2103.75	2159,5	2171.0	2195.0	2200.0	2.585.5	37.84£	<b>)</b> (
FIELD	ands	õ >	14.8	3.2	3.2	3.2	3.4		-	2.3	113	١٦	ζ.,	3.7	8.4	
11.4 (1)	ds   *	,	HOURS	24.75	13.5	24.5	69.75	\$ 0	3.35	24.24	5.11	24,0	0.81	2.61	8.4 56.11	(
	a of Eum		FEET	46	8.4	68	06)	£ .	<b>a</b> :	γłο	20	39	25	65	661	je:
47.5	OPERATOR THUS 105 DETECTED		DEPTH OUT	8490	8638	.6298	8837	8140	h h 28	8868	8006	3046	1216	2816	9365	K
STATE	0.0	102	JET	222	2	442	- C/ - 7/	يج جي برا	Fig. 2	1442	440	2 % 4 2 % 4	224	201	~ <del></del>	
9	OR	DRIGG.	TYPE	HTC X44	HTC: JTH	STC FY	STC FS	CHAIS -MC 23	CHAIS MC A3	STC FY	STC FY	STC F4	#7c X44	STC FY	STC F.4	·
W77	CONTRACTOR	PHKKER DRUG.	SIZE	1214	13./5	12%	*/, 4:	8 3/4	<i><sup>1</sup>√</i> <sub>C</sub> 8	1, €1	7/. </td <td>1/101</td> <td>1214</td> <td>1/,74</td> <td>اح الله</td> <td>1</td>	1/101	1214	1/,74	اح الله	1
COUNTY	CON.	Ž	0%	7	유	Ĉ.	7	\$	3	5	3	R.R.	2	یم	15	Tage To

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2 2	CONTRACTOR	OPE	OPERATOR		SPUD	900	UNDER	SURF UN	UNDER INT	UNDER LONG UNDER LINER UNDER LINER REACHED TO	NOT &	OND	17 H3	VER U	1105	TIME	A PEA	геаснер ru 9/14/8/	0,	<u> </u>
PARKER		JH/	PHICIPS PETROLFUM	KOTENW	3,	3/8/8/	04 /		8075			_	-		{			0117		
NO SIZE	TYPE	757	DEPTH OUT	FEET	HOURS	F. H. H. H.	HOURS HR DRLG HRS	TRIP HO	TRIP HOURLY	ST FT		RPMP	PULIP FLOW		7 6 7	GHADE B G	DEV WY	3 5	AEWARKS	
1,0	STC FY	222	9524	159	3834 4.1	1,7	9388,50	01	550.	061	35	65	22004BS		60	8/2		9.0		1
14, 21	HTC · JSS-R	33T	1816	726	51 1/4 1/99	4.99	9439, 75	~	. oss	150.9	35	53	2150 485		00	- 8		9.0		
<b>%</b> CI	STC_F5	ದವಪ	9992.	21)	45% 4.6	7.4	94.85.50		250	67//	8	SS	2150 485		2	<del>2</del> 80		9,0	-	
N, 21	4 STC F5	1	10,301	304	1134	4.3	9557.25		1 .055	166.5	88	55	2200 485	85			.	5. 5.		1
F/, C1	4 HTC JSS-R	T	16, 452	ısı	30 %	4.9	9.588.00	۷.	250	140.7	** %	9	2300	382	3	S		9.0		1
12 1/4	нх 21H у	223	075'01	801	313/4	3.4	36.19.75		580	763.7	30	\$	2200	415	•∞	<u>~</u> ₹		<u>~</u>	4 ag	
, ", ",		5 % G Z Z	36.40	ShSI	52 "H	29.6	9672.00		550		30,00	55	0001	584	σ0	H %		<del>;</del>	LODSE COTTERS BROKEN TEETH	
17,11	1/2 GRANT	5 R. 7.	- LVV	5,0	17 34 22.3	26.3	94.89.75		550		°, (0)	60	SOC	440	<b></b>			5.0	WASHOUT IN WELD	
17.12		C S S S	5024	44	42	2	9731.75		550		% %	60	1500	8HO	و			<u>6-</u>	HEEL PAC OUT OF PILOT I CONE BAD BEARING	
17.12	2 GRANT	Z#;   € ∓ =	26.32	809	38%	3 814 1559	9770.00		550	·	0,00	9	308	340	00	₩ 200		9	1 CONE LOOSE LOST PILOT BIT	
1, 21	My STC FH	38 3	26.35	0	1		9770.00		550										TAG FISH	.
17/2	1,2 GRANT	733 222	22.73	7	17.	71/4 5.7	9777.25		550		<u>%</u>	10, 00	1700	1700 836	000	200		<u>~</u> (	LOST PILOT BIT ("2)	C

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		- 10	300 PSI DROP	DRILL TO TOP OF FISH	FINISH DRILLING OUT TO FISH	RUN IN AND THE FISH NO DRILLING		. 2 LOOSE CUTTERS	CHECK DRILL COLLARS			-}	TAG AND MUSH FISH		The state of the s
<i>неце мо.</i> А - No! <i>пеаснео</i> )	18/14/18	74 V 30	9,0	9,0	ð.	6-	85	9.0	9.0	<u>6</u>	6		<u></u>	8	0,6
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NB 32 J44 ₹B 33 J44 NB 34 F4 washout NB38 MC23 NB 40 X44 NB 41 X44 DYNADRILL NB 42 J44 NB 43 F4 NB46 MC23 NB47 F4 NB48 F4 RR48 NB49 X44 NB50 F4 NB51 F4 NB52\_F4 NB53 J55R NB54 F5. ----+ (-) NBSD F3 <u>--</u> NB56 J55R - NB57 X44 washoul

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LEASE TOMBSTONE STATE A

WELL NO.

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DATE | DEPTH | NATURE OF WORK PERFORMED | TOMBSTONE STATE-A WELL NO. 1 TD 10561. MILL ON JUNK. 9/5/81- | REAMED 17-1/2 IN. TO 7442 FT, 92 FT. TRIP TO CHANGE HO. WIH. MU

HEAMED 17-1/2 IN. TO 7442 FT, 92 FT. TRIP TO CHANGE HO. WIH. MUD 9.1, VIS 43, WL 10.2. 9/6/81 - OPEN 12-1/4 IN. HOLE TO 17-1/2 IN. TO 7558 FT., 116 FT. COOH TO CHANGE HOLE OPENER. MUD 9.1, VIS 42, WL 11.0. 9/7/81 - FIN COOH, BIM HALF OF HO SHEARED OFF, LFFT 3 CUTTERS, 3 PINS, LOWER HO BODY AND 12-1/4 BIT IN HOLE. PU MAGNET, WIH, WORK ON FISH. COOH, NO REC. LD MAGNET, PU 12-1/4 BIT, WIH, WORK ON FISH, COOH, LD BIT. PU MAGNET, WIH, WORK ON FISH. COOH. NO REC. LD MAGNET, PU JUNK BASKET. MUD 9.1, VIS 43, WL 10.5. 9/8/81 PU FISHING TOOLS, START IH, SLIPPED OUT OF GEAR AND DROPPED BLOCKS. DOWN 14 HOURS STRINGING LINE. COOH TO CHECK DRILL STRING. WI H, WASHED AND REAMED 30 FT. TO BTM. ATTEMPT TO MILL OVER FISH.

TO MBSTONE STATE-A WELL NO. 1 TD 10561. WIH W/MAGNET, WSH OVER FISH W/POOR BOY BASKET. CHAIN OOH, NO REC. PU MAGNET, WIH, WORK ON FI SH. COOH, NO REC. LD MAGNET, PU MILL. WIH, MILL ON FISH.

TOMESTONE STATE-A WELL NO. 1 TD 10561. WO SHOTS. FIN GIH W/14 IN. MAGNET, WORK ON JUNK W/MAGNET. CHAIN OOH, NO REC. LD BHA, WIH, CIRC AND COND HOLE. WO DOWN HOLE SHOT. MUD 9.1, VIS 43, WL 10.2..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. FISHING FIRING HEAD W/WL. CIRC AND COND HOLE, COOH, MAKE UP JUNK SHOT, WIH W/JUNK SHOT, DROP FIRING HEAD, DID NOT FIRE, FISH FIRING HEAD W/WL. COOH W/JUNK SHOT, WIH W/JUNK SHOT, CIRC ON FISH. DROP FIRING HEAD, DID NOT FIRE, FISH FIRING HEAD W/WL. MUD 9.2, VIS 42, WL 10..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. MILLING ON JUNK. 9/12/81 COOH W/FIRING HEAD ON WL. WIH 30 STDS. SET JUNK SHOT ON JUNK. RAN FIRING HEAD ON WL. NO SHOT. COOH W/FIRING HEAD ON WL. CIRC HOLE. COOH W/JUNK SHOT. LD JUNK SHOT. PU 9 IN. JUNK BASKET AND 12-1/4 IN. BIT. WIH. CIRC AND WORKED ON JUNK. COOH. PU 17-1/2 IN. 3-PT REAMER AND 12-3/4 IN. IMPRESSION BLOCK. CIRC AND SET DOWN ON FISH. START COOH W/IMP BLOCK. MUD 9.2, VIS 42, WL 10.2. 9/13/81 - FIN COOH W/IMP BLK. LD IMP BLK. RU SCHL., RUN VELOCITY SURVEY. RD SCHL. WIH W/7-1/4 IN. X 3.7 FT. EXTENSION. CIRC AND WORK ON JUNK. COOH, EXTENSION WORN ON BTM W/SCRATCHES 1-1/2 FT. UP FROM BTM. PU JUNK-SHOT. START GIH W/JUNK SHOT. 9/14/81 -FIN GIH W/JUNK SHOT. RUN FIRING HEAD ON WL 3 TIMES, NO SHOT. COOH TO CHG JUNK SHOT. WIH, CIRC ON FISH. RUN FIRING HEAD, SHOT FIRED AT 7556 FT. COOH. CHECK TORQUE ON ALL DC/S/ PU JUNK MILL AND 2 JUNK BASKETS. WIH. NOW MILLING ON JUNK AT 7557 FT. MUD 9.1. VIS 41, WL 11.2..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. LDDP. MILLED ON JUNK. COOH W/MILL. MILL WORN SMOOTH ON BTM, NO REC IN JUNK BASKETS. LD FISHING TOOLS. LD BHA. PU 25 JTS DP. WIH. CIRC HOLE. HOWCO SET PLUG FROM 7556-7456 FT. W/190 SX CLASS G W/ 1/10 OF 1 PERCENT HR-7. LD 102 JTS DP. MUD 9.1, VIS 41, WL 10.5..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. ND BOP/S. LDDP. RU HOWCO. LAYED PLUG 2195-1995 FT. W/356 SX CLASS G CMT. LD 68 JTS DP. LAYED 25 SX CLASS G CMT PLUG IN TOP OF SURF CSG. LOADED OUT CASG. START ND BOP..

TOMBSTONE STATE-A WELL NO. 1 P AND A. ND BOP/S. CLEAN CELLAR.

TOMBSTONE STATE-A WELL NO. I P AND A. NO BUT JU COLO MINDIGHT, CUT OFF HEAD. SET DRY HOLE MARKER. RELEASED RIG AT 12/00 MINDIGHT, 9/16/81. PLUGGED AND ABANDONED 9/16/81. FINAL REPORT..

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LEASE TOMBSTONE STATE A

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TOMBSTONE STATE-A WELL NO. 1 TD 10561. REAMING 17-1/2 IN. HOLE. 8/22/81 - DRLD 17-1/2 IN. HOLE TO 5832 FT. COUH. PU FISHING TOOLS TO WASH OVER FISH, COULD NOT GET BELOW 3550 FT. W/STIFF 17 IN. ASSEMBLY. COOH. WIH WIBIT SUB BELOW 17-1/2 IN. REAMER BODY, COULD NOT TAG FISH. START COOH W/BIT SUE. MUD 9.1, VIS 42, WL 11. 8/23/81 FIN COOH W/BIT SUB. WIH W/12-1/4 IN. BIT. WASHED AND REAMED TO 6621 FT., TAGGED FISH. COOH. WIH W/BIT SUB, ATTEMPT TO SCHEW INTO FISH, UNSUCCESSFUL. COOH. LD FISHING TOOLS. PU HOLE OPENER, WIH, REAMED 60 FT. TO BIM. OPEN HOLE TO 17-1/2 IN. TO 5841 FT. MUD 9.1, VIS 49, WL 13. 8/24/81 - OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6295 FT., 454 FT. MUD 9.1, VIS 41, WL 12..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. REAMING 17-1/2 IN. HOLE. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6352 FT. TRIP 10 CHG HOLE OPENER. REAMED 80 FT. TO BTM. OPENED HOLE TO 6418 FT. TOTAL 123 Fr. MUD 9.1, VIS 38, WL 11.8..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. REAMING 17-1/2 IN. HOLE. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6442 FT. TRIP TO CHG HOLE OPENER. REAMED 60 FT. TO BTM. OPENED HOLE TO 6511 FT. TOTAL 93 FT. MUD 9.1, VIS 40, WL 12.2..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. MAGNAFLUXING BHA. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6615 FT., 104 FT. COOH, INSPECT BHA. MUD 9.1, VIS 41, WL 12..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. WIH W/BASKET. FIN INSPECTING BHA. WIH W/17-1/2 IN. BIT. DRLG TO TOP OF FISH AT 6631 FT. CIRC BIMS UP, STRAP OOH. LD BHA. PU FISHING TOOLS. START GIH, EMG TIGHT HOLE. MUD 9.1, VIS 46, WL 11..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. PUSHING JUNK TO BIM. 08/29/81 - WASHED AND REAMED TO BIM WAJUNK BASKET. ATTEMPTED TO WASH OVER FISH 6631-6634 FT. COOH, NO HEC. LD BASKET. PU INPRESSION BLOCK. WIH W/IMPRESSION BLOCK, TOP OF FISH 6878 FT. COOH. PU HOLE OPENER, CUTTING DRLG LINE. MUD 9.1, VIS 44, WL 10.8. 8/30/81 WIH WIHOLE OPENER. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6760 FT., 129 FT. MUD 9.1, VIS 42, WL 10.6. 8/31/81 - OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6836 FT. COOH. PU JUNK MILL. WIH. STARTED PUSHING FISH TO BIM. PUSHED TO 7671FT. MUD 9.1, VIS 41, WL 11-0..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. RMG 17-1/2 IN. HOLE. MILLED AND JARRED ON FISH AT 7671 FT., FISH WOULD NOT GO DOWN HOLE. COOH. LD MILL. PU HOLE OPENER, WIH, WASHED AND REAMED 60 FT. TO BIM. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 6950 FT. MUD 9.1, VIS 43, WL 10.6.

TOMBSTONE STATE-A WELL NO. 1 TD 10561. AMG 17-1/2 IN. HOLF. OPEN 12-1/4 IN. HOLF TO 17-1/2 IN. TO 7108 FT. STAFT COOH. MUD 9.1, VIS 42, WL 10.5..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. REAMING. FIN COOH. PU HOLE OPENER. WIH OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 7217 FT., 109 F1. MUD 9.1, VIS 43, WL 10.8..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. REAMING. OPEN 12-1/4 IN. HOLE TO 17-1/2 IN. TO 7277 FT. THIP FOR HOLE OPENER CHG, OPEN HDLE 10 7343 FT. MUD 9.1, VIS 40, WL 10.5..

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TOMBSTONE STATE-A WELL NO. 1 TD 10561. REAMING. 8/8/81 - FIN LOGGING. RAN DIL, FDC-CNL, BHC SONIC AND CDM. WIH. START LDDP. MUD 9.1, VIS 42, WL 15.5. 8/9/81 - CHGD OUT 8500 FT. DP. PU BHA. REAMED 348 FT. TO 2443 FT. MUD 9, VIS 35, WL 14. 8/10/81 - OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. HOLE TO 3267 FT., 824 FT. MUD 9.0, VIS 39, WL 12..

TOMPSTONE STATE-A WELL NO. 1 TD 10561. TRIPPING. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 3640 FT. PROGRESS 373 FT. COOH TO CHANGE HOLE OPENERS. START IH. MUD 9-1, VIS 38, WL 11-6..

TOMPSTONE STATE-A WELL NO. 1 TD 10561. REAMED 276 FT. TO 3917 FT. MUD 9.1, VIS 41, WL 11...

TOMBSTONE STATE-A-WELL NO. 1 TD 10561. REAMING 17-1/2 IN. HOLE REAMED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 4100 FT. THIP TO CHG HOLE OPENER. REAMED TO 4365 FT. TOTAL 449 FT. MUD 9-1, VIS 38, WL 12..

TOMBSTONE STATE-A WELL NO. 1 TD .10561. REAMING 17-1/2 IN. HOLE. REAMED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 4860 FT., 495 FT. MUD 9.1, UIS 40, WL 11.6..

TOMBSTONE STATE-A WELL NO. 1 TD 10561. COOH. 8/15/81 - OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 5177 FT., 317 FT. MUD 9.1, VIS 39, WL 12. 8/16/81 - OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 5550 FT., 373 FT. MUD 9.1, VIS 40, WL 12.8. 8/17/81 - OPENED HOLE TO 5632 FT., 82 FT. COOH, LEFT 12-1/4 IN. PILOT BIT IH. WIH W/12-1/4 IN. BIT. TAGGED FISH AT 5832 FT. COOH. WIH W/BIT SUB. ATTEMPTED TO SCREW INTO FISH, NOSUCCESS. SET DOWN 50,000 LB. STAFT COOH W/BIT SUB. MUD 9.1, VIS 43, WL 12..

TOMESTONE STATE-A WELL NO. 1 TD 10561. REAMING 17-1/2 IN. HOLE. FIN COOH W/BIT SUB. PU HOLE OPENER. REAMED 232 FT. TO BTM. REAMED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 5667 FT. MUD 9.1, VIS 40, WI 12-5.

TOMBSTONE STATE-A WELL NO. 1 TD 10561. COOH W/17-1/2 IN. BIT. REAMED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 5673 FT. COOH, LEFT 12-1/4 IN. PILOT BIT IH. WIH W/BIT SUB, SCHEWED ONTO PILOT BIT. COOH, REC PILOT BIT. PU 17-1/2 IN. BIT. WIH. REAMED 120 FT. TO BIM. LOST 400 PSI PUMP PRESS. COOH. LEFT 17-1/2 IN. BIT IH. WIH W/BIT SUB. SCREWED ONTO BIT. START COOH. MUD 9.1, VIS 38, WL 12.

TOMBSTONE STATE-A WELL NO. 1 TD 10561. PU SHOCK SUB. FIN COOH, REC 17-1/2 IN. BIT. PU 3 PT RME AND HOLE OPENER. WIH, REAMED 563 FT. TO BTM. OPENED HOLE TO 17-1/2 IN. TO 5689 FT. LOST 300 PSI PIMP PRESS. COOH, LOOKING FOR LEAK. FOUND PLUG OUT ON HOLE OPENER. CHANGE OUT BHA. MUD 9.1, VIS 37, WL 12.4..

TOMBSTONE STATE-A WFLL NO. 1 TD 10561. RMG W/17-1/2 IN. BIT. WIH W/HOLE OPENER. OPENED 12-1/4 IN. HOLE TO 17-1/2 IN. TO 5830 FT. COOH. LD HOLE OPENER AND 3 PT REAMER. PU 17-1/2 IN. PIT. WIH. WASHED AND REAMED 5750 FT. TO 5830 FT. TOP OF 12-1/4 IN. PILOT BIT 5832 FT. MUD 9.1, VIS 40, WL 11.6..

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Duan Philips Febr. Co.
Politips Petr. Co.
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SHEET\_NO. 19810 WELL NO. LEASE TOMBSTONE STATE A O & G CONS. COMM. DATE DEPTH NATURE OF WORK PERFORMED 1981 TOMBSTONE STATE-A WELL NO. 1 D 9299. DRLD TO 9299 FT., 75 FT. July SURVEYS - 3-3/4 DEG AT 9255 FT., 4 DEG AT 9287 FT. MUD 9, VIS 43, 21 TOMBSTONE STATE-A WELL NO. 1 D 9359. DRLD TO 9359 FT., 60 FT. SURVEYS - 4 DEG AT 9317 FT., 4 DEG AT 9348 FT. MUD 9.0, VIS 44, 22 WL 17.5.. TOMBSTONE STATE-A WELL NO. 1 D 9400. DRLD TO 9365 FT. TRIP FOR BIT. TESTED BOP. WIH, REAMED 60 FT. TO BIM. DRLD TO 9400 FT. SURVEY 23 - 4 DEG AT 9365 FT- MUD 9.0, VIS 43, WL 17.8.. TOMBSTONE STATE-A WELL NO. 1 D 9516. DRLD TO 9516 FT., 116 FT. SURVEYS - 3-1/2 DEG AT 9411 FT., 3 DEG AT 9443 FT., 3-1/4 DEG AT 24 9474 FT., 3 DEG AT 9507 FT. MUD 9.0, VIS 45, WL 18.. TOMBSTONE STATE-A-WELL NO. 1 D'9781. 7/25/81 - DRLD TO 9525 FT. TRIP FOR BIT. DRLD TO 9587 FT. SURVEY - 2-3/4 DEG AT 9570 FT. MUD 9.0, VIS 45, WL 18. 7/26/81 - DELD TO 9694 FT., 107 FT. SURVEY -25-27 3-1/2 DEG AT 9634 FT. MUD 9.0, VIS 42, WL 18. 7/27/81 - DRLD TO 9781 FT., 87 FT. SURVEYS - 2-1/2 DEG AT 9696 FT., 3 DEG AT 9759 FT. MUD 9.0, VIS 42, WL 18.4.. TOMBSTONE STATE-A WELL NO. 1 D 9852. FIN COOH. PU NEW BIT. WIH, DRLD TO 9852 FT. SURVEYS: 3 DEG AT 9781 FT., 2-1/2 DEG AT 28 9823 FT. MUD 9.0, VIS 41, WL 17.9.. TOMBSTONE STATE-A WELL NO. 1 TD 9959. CIRC SAMPLES. DRLD TO 9959 FT., 107 FT. CIRC FOR SAMPLES. SURVEYS - 2-1/4 DEG AT 9885 29 FT., 2-1/4 DEG AT 9948 FT. MUD 9.0, VIS 39, WL 17.5.. TOMBSTONE STATE-A WELL NO. 1 D 10007. DRLD 33 FT. TO 9992 FT. TRIP FOR BIT. WASH 30 FT. TO BTM. DRLD 15 FT. TO 10007 FT. SURVEY 30 - 2-1/4 DEG AT 9992 FT. MUD 8.9, VIS 44, WL 18.. TOMESTONE STATE-A WELL NO. 1 D 10097. DRLD TO 10097 FT., 90 FT. SURVEY - 2 DEG AT 10050 FT. MUD 9.0, VIS 41, WL 18.. 3/ . TOMBSTONE STATE-A WELL NO. 1 D 10331. 8/1/81 - DRLD 100 FT. TO 10197 FT. SURVEYS - 1-3/4 DEG AT 10113 FT. AND 10175 FT. MUD 8.9. VIS 41, WL 17. 8/2/81 - DRLD 103 FT. TO 10300 FT. SURVEY - 1-3/4 DEG AT 10237 FT. MUD 8.9, VIS 42, WL 17.5. 8/3/81 - DRLD 31 FT. TO 10331 FT. TRIP TO CHG BIT . MAGNAFLUX BHA. TEST BOP/S, OK. WIH. 1-3 SURVEY - 2-1/4 DEG AT 10301 FT. MUD 9.0, VIS 42, WL 18.. TOMBSTONE STATE-A WELL NO. 1 D 10425. DRLD 93 FT. TO 10425 FT. SURVEYS - 2-1/4 DEG AT 10332 FT. AND 10363 FT. 2 DEG AT 10394 FT. 4 MUD 9.1, VIS 47, WL 16.. TOMBSTONE STATE-A WELL NO. 1 D 10467. DRLD 42 FT. TO 10467 FT.

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TOMBSTONE STATE-A WELL NO. 1 TO 10561. LOGGING. DALD 14 FT. TO 10561 FT. CIRC FOR LOGS. SHORT TRIP. COUH. RU SCHL. SURVEY - 2 DEG AT 10561. FT. MUD 9-1, VIS 47, WL 15..

SURVEY - 1-3/4 DEG AT 10518 FT. MUD 9, VIS 47, WL 16..

TRIP FOR PRESS LOWS. REPLACED WASHOUT IN JARS. WIH. SURVEY - 1-3/4

TOMBSTONE STATE-A WELL NO. 1 D 10547. DRLD 10 10547 FT., 80 FT.

DEG AT 10456 FT. MUD 9, VIS 57, WL 15.

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DAILY REPORT DETAILED

JUL 27 1981

O & G CONS. COMM. WELL NO. SHEET NO. LEASE TOMBSTONE STATE A · () DATE NATURE OF WORK PERFORMED TOMBSTONE STATE-A WELL NO. 1 D 8662. 7/3/81 - DRLD TO 8485 FT., 62 FT. SURVEYS - 4 DEG AT 8454 FT., 4 DEG AT 8483 FT. MUD 9.0, July VIS 38, WL 13.6. 7/4/81 - DRLD TO 8490 FT. TRIP FOR BIT. REAMED 30 FT. TO BTM, DRLD. TO 8534 FT. SURVEYS - 4 DEG AT 8490 FT. 3-6 3-3/4 DEG AT 8514 FT. MUD 9.0, VIS 43, WL 14. 7/5/81 DRLD TO 8580 FT. TRIP FOR BIT SURVEYS - 3-3/4 DEG AT 8545 FT. AND 8578 FT. MUD 9.0, VIS 39, WL 13. 7/6/81 - DRLD TO 8662 FT., 82 FT. SURVEY 3-3/4 DEG AT 8606 FT. AND 8636 FT. MUD 9, VIS 43, WL 15.. .. TOMBSTONE STATE-A WELL NO. 1 D 8675. DRLD TO 8675 FT., 13 FT. COOH. LD DYNADRILL. TEST BOP/S. WIH W/BIT. SURVEYS - 3-3/4 DEG 7 AT 8667 FT., 4 DEG AT 8674 FT. MUD 9, VIS 41, W. 14.. TOMBSTONE STATE-A WELL NO. 1 D 8731. DRLD TO 8731 FT., 56 FT. 8 SURVEY - 4 DEG AT 8704 FT. MUD 9.0 , VIS 44, WL 14. TOMBSTONE STATE-A WELL NO. 1 D 8789. DRLD TO 8789 FT., 58 FT. SURVEYS - 3-1/2 DEG AT 8736 FT., 3-3/4 DEG AT 8766 FT. MUD 9. VIS 44. WL 15. TOMBSTONE STATE-A WELL NO. 1 TD 8837. COOH. DRLD TO 8837 FT., 10 48 FT. LOST 250 PSI PUMP PRESS. START COOH. SURVEYS - 3-3/4 DEG AT 8797 FT., 4 DEG AT 8828 FT. MUD 9.0, VIS 38, WL 15.6. TOMBSTONE STATE-A WELL NO. 1 D 8954. 7/11/81 - FIN. COOH, FOUND CRACK 6 FT. BELOW TBG JT ON 5TH JT ABOVE HVY WT HAIRLINE CHACK IN BOX OF TOP TELEDRIFT SUB. PU CORE BBL. WIH. WASHED AND REAMED ]]-[3 90 FT. TO BIM. SOREDEBESS-8840 FT - 8 FT BASORE BBL JAMMED. COOH RECE START LD CORE. 7/12/81 FIN LD CORE: WIH-W/CORE BBL. CORED BRAU BRAU BRESDOWNED COOK, REC 3 1/2 FT. PU BIT. WIH. TRLD 33 FT. TO 8873 FT. MUD 9:0, VIS 46, WL 16. 7/13/81 DRLD TO 8954 FT.; 81 FT. SURVEYS - 4 DEG AT 8891 FT., 4-3/4 DEG AT 8953 FT. MUD 9.0; VIS 37; WL 15.6. TOMBSTONE STATE-A WELL NO. 1 TD 8988. TRIPPING FOR PRESSURE

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VIS 35, WL 16..

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TOMBSTONE STATE-A WELL NO. 1 D 9224. 7/18/81 - RNG WL SURVEY. DRLD TO 9121 FT., 25 FT. COOH. MAGNAFLUX BHA. LD 1 DC. WIH. SURVEY - 4 DEG AT 9121 FT. MUD 9, VIS 50, WL 16. 7/19/81 - TRIPPING FOR BIT. DRLD TO 9186 FT., 65 FT. DYNADRILL PRESSURED UP. START COOH. SURVEYS - 5 DEG AT 9154 FT., 4 DEG AT 9186 FT. MUD 9, VIS 36, WL 17. FORM \$1.7/20/81 - FIN COOH. LD DYNADRILL. PU BHA AND WIH. DRLD TO 9224 FT. 38 FT. SURVEY - 3-1/2 DEG AT 9224 FT. MUD 9.0, VIS 43, WL 16.. 10.0

LOSS. DRLD TO 8988 FT. 34 FT. SURVEY - 5 DEG AT 8985 FT. MUD 9.

TOMBSTONE STATE-A WELL NO. 1 D 9050. DRLG W/DYNADRILL. FIN COOH, FOUND CRACK IN DC 2ND FROM BTM. PU DYNADRILL, WIH, REAMED

TOMBSTONE STATE-A WELL NO. 1 D 9096. DRLG W/DYNADRILL. DRLD TO 9057 FT. COOH STRAPPING PIPE. STRAP CORRECTION 9057 FT. TO

SURVEYS - 4 DEG AT 9057 FT. AND 9095 FT. MUD 9.0, VIS 43, WL 16...

TIGHT HOLE 8888 FT. TO BTM. DRLD TO 9050 FT. SURVEY - 4 DEG AT

9046 FT. WIH W/NEW BIT, REAMED 90 FT. TO BTM. DRLD TO 9096 FT.

OUT. TEST BOPS, OK. WIH, REAMED 60 FT. TO BTM. DRLD TO 9008 FT.

20 FT. LOST 250 PSI PUMP PRESS. START COOH. MUD 9.1. VIS 37.

9044 FT. MUD 9.0, VIS 46, WL 15.5..

TOMBSTONE STATE-A WELL NO. 1 TD 9008. COOH. FIN COOH, BIT WASHED

-	1 5 4 5 5	TOMBSTONE STATE	A	WELL NO.	1	RECEIVED
6	LEASE	TOTING OTHER				JUL 13 1981
	ATE	TOTAL DEPTH	4			O & G CONS. COMM,
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June 17	SURVEY	- 3 DEG AT 76	58. MUD 9.9	9, VIS 36,	WL 11-	7708 FT., 74 FT.
18	150 PSI	STONE STATE-A W PUMP PRESS. ST WL 14.4	TART OOH.	TD 7760. SURVEY - 3	COOH. DE	RLD 52 FT., LOST 7720 FT. MUD 9.9,
19	TOM OUT IN PSI PI	MBSTONE STATE-A N BIT. GIH, REAM MP PRESS. COOH 79 FT. SURVEY -	1 60 FT. TO FOUND WA 4 DEG AT	O BTM. DRL SH OUT IN 7778 FT. M	D TO 77° WELD ON IUD 9.1.	H, FOUND HOLE WASHED 70 FT., LOST 200 BIT. GIH, DRLD VIS 36, WL 13.8
20-22	DRLD 7 36, WI AT 78: DRLD 7	0 7834 FT., 55 13.5. 6/21/81	FT. SURVE - DRLD TO 70 FT. MUD FT. COOH.	7 - 4 DEG 7892 FT., 9.9, VIS TEST BOP/	58 FT. 35. WL	SOP/S. 6/20/81 - FT. MUD 9.1, VIS SURVEYS - 4 DEG 14.5. 6/22/81 - Y - 3 3/4 DEG AT
23	HVY W	MBSTONE STATE-A	WELL NO. SI PUMP PR 40 FT. TO	1 D 7998. ESS. COOH. BTM. DRLI	START G CRACK D TO 799	IH, PU KELLY AND IN 115TH JT ABOVE 8 FT., 67 FT.
24	SURVE	MBSTONE STATE-A YS: 3 3/4 DEG 18 FT. MUD 8.9.	AT 8056 FT	4 DEG	DRLD TO	8145 FT., 147 FT.
25	8180 BIT•	FT., 109 FT. C PU JUNK BASKET	IRC TO COR GIH. WOR	E, COOH, F	FOUND 24	CORE BBL. DRLD TO TEETH MISSING OFF NO REC. PU CORE BBL. IS 35, WL 15.6
<b>H</b>	GIH BIT.	W/CORE BBL, COR HIT BRIDGE AT	E 8180-818 7870 FT.,	S6 FT. COO STUCK PIP	H, REC 6	NG TIGHT HOLE. FIN FT. CORE. GIH W/ JARS. CAME FREE TIGHT SPOT MUD
27-29	9.0. TO: STUCK OF DP VIS 3 AT 82	VIS 35, WL 14. MBSTONE STATE-A PIPE AND REAM WSHD AND REAM	6  WELL NO.  D. LOST 20  MED 372 FT.  81 - DRLD  VIS 42.	1 D 8306. 00 PSI. CO DRLD TO TO 8254 F	DRLG. 6 OH. REPL 8193 FT. T., 61 F	ACED CRACKED JUT  TO FT. MUD 9,  TO SURVEY 4 3/4 DEG  D TO 8306 FT.,
30	ַ ער ער	8.9, VIS 41, WL	13			0 8359 FT., 53 FT.
July (	6 FT	<ul> <li>COOH, INSPECT</li> </ul>	BHA• CHAN 0 8372 FT•	GE OUT HW	DP. TEST	DRLD TO 8365 FT, BOP/S. PU AND WIH 4 3/4 DEG AT 8365 FT
2 FOR	1					8423 FT., 51 FT. 9, VIS 37, WL 14
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TOMBSTONE STATE-A WELL NO. 1 D 6763. 5/30/81 - CORED 6521-6522 FT. COOH W/CORE NO. 4. LD CORE BBL, 19 FT-15 FT REC. MAGNAFLUX BHA. WIH, DRLD FROM 6522-6561 FT. START OOH. LOST 125 PSI. SURVEYS - 1-1/2 DEG AT 6522 FT, 1/2 DEG AT 6561 FT. MUD 9.1, VIS 34, VL 16. 5/31/81 -FIN COOH. REPLACED 2 DC.5. WIH. DRLD TO 6663 FT., 102 FT. SURVEY - 1-1/2 DEG AT 6586 FT. MUD 9.1. VIS 34. WL 17. DRLD TO 6763 FT. 100 FT. SURVEYS - 1-3/4 DEG AT 6696 FT, 1-1/2 DEG AT 6738 FT. MUD 9.1, VIS 35, WL 14 ..

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TOMBSTONE STATE-A WELL NO. 1 D 6841. DRLD TO 6840 FT. COOH, LOST 200 PSI. LD BTM JT HUY WT DP. RESUMED DRLG TO 6841 FT. SURVEYS - 1-1/2 DEG AT 6887 FT. 2 DEG AT 6817 FT. MUD 9.1. VIS 34, WL 14..

TOMBSTONE STATE-A WELL NO. 1 D 6961. DRLD TO 6961 FT. 120 FT. SURVEYS - 2 DEG AT 6829 FT, 2-1/4 DEG AT 6923 FT. MUD 9.1, VI5 34, WL 15...

TOMBSTONE STATE-A WELL NO. 1 D 7060. DRLD TO 7060 FT. 99 FT. SURVEY-2-1/2 DEG AT 7035 FT. MUD 9.2, VIS 35, WL 15.5..

TOMBSTONE STATE-A WELL NO. 1 D 7136. DRLD TO 7136 FT. 76 FT. SURVEYS-3 DEG AT 7044 FT, 3-1/2 DEG AT 7107 FT. MUD 9.2, VIS 34, WL 15..

TOMBSTONE STATE-A WELL NO. 1 D 7266. 6/6/81 - DRLD 50 FT. COOH.

TD BOP, S. HYDRIL LEAKING. WIH W/NEW BIT, REAMED 80 FT AND DRLD 15 FT TO 7151 FT. SURVEY - 4 DEG AT 7136 FT. MUD 9.2, VIS 34, WL 16. 6/7/81-DRLD TO 7204 FT, 53 FT. SURVEY - 4 DEG AT 7170 FT. MUD 9.1. VIS 34. WL 16. 6/8/81 - DRLD TO 7266 FT, 62 FT. SURVEY - 3-3/4 DEG AT 7231 FT. MUD 9.2, VIS 35, WL 14..

TOMBSTONE STATE-A WELL NO. 1 TD 7318. TRIPPING FOR BIT. DRLD TO 7318 FT, 52 FT. START COOH TO CHG BIT. SURVEY - 3-3/4 DEG AT 7261 FT. MUD 9.1, VIS 33, WL 15.8..

TOMBSTONE STATE-A WELL NO. 1 D 7329. FIN-COOH. /REPLACED HYDRIL RUBBER. WIH. WASHED AND REAMED 60 FT. TO BTM.) DRLD TO 7329 FT. WL 15..

TOMBSTONE STATE-A WELL NO. 1 D 7381. DRLD TO 7381 FT. 52 FT. SURVEYS - 3-1/2 DEG AT 7321 FT., 3-1/4 DEG AT 7353 FT. MUD 9.1, VIS 33, WL 14..

TOMBSTONE STATE-A WELL NO. 1 D 7437. DRLD TO 7411 FT. WORKED TITE HOLE. RESUMED DRLG TO 7437 FT. TOTAL 56 FT. SURVEY - 3-1/2 DEG AT 7414 FT. MUD 9.0, VIS 33, WL 15..

TOMBSTONE STATE-A WELL NO. 1 D 7696. 6/13/81 - DRLD TO 7492 FT 55 FT. SURVEY - 3-1/2 DEG AT 7443 FT. MUD 9.1, VIS 35, WL 14.4. 6/14/81 DRLD TO 7520 FT. 28 FT. MAGNAFLUX BHA. TEST BOP, S. SURVEY - 3-1/4 DEG AT 7507 FT. MUD 9.1, VIS 34, WL 14. 6/15/81 - DRLD TO 7696 FT, 76 FT. SURVEY 3-1/2 DEG AT 7535. MUD 9.0, VIS 35, WL 15.0

TOMBSTONE STATE-A WELL NO. 1 D7634. DRILLED TO 7634 FT., 38 FT., LOST 200 PSI. COOH TO REPLACE WASHOUT IN DP. WIH. SURVEY - 3 1/2 DEG-FORM 911 AT 7597 - MUD 9.9, VIS 35, WL 14 --

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May

TOMBSTONE STATE-A WELL NO. 1 D 5636. 5/16/81 - DRLD TO 5473 FT. CIRC AND COND HOLE. COOH. PU CORE BBL. WIH TO CORE. SURVEY - 2 DEG AT 5453 FT. MUD 8.9, VIS 33, WL 16. 5/17/81 - CORED 6 FT. COOH, FULL RECOVERY. LD CORE BBL. PU BHA, WIH, DRLD TO 5526 FT. SURVEY - 1 DEG AT 5503 FT. MUD 8.9, VIS 33, WL 16.2. 5/18/81 - DRLD TO 5636 FT, 110 FT. SURVEYS - 2 DEG AT 5534 FT, 2-1/2 DEG AT 5575 FT. MUD 8.8, VIS 32, WL 16.6..

TOMBSTONE STATE-A WELL NO. I D 5715. DRLD TO 5645 FT. TRIP FOR BIT. DRLD TO 5715 FT. SURVEYS - 2 DEG AT 5645 FT. 1-3/4 DEG AT 5667 FT. MUD 8.9, VIS 31, WL 16.2..

TOMBSTONE STATE-A WELL NO. 1 TD 5767. TRIP FOR HOLE IN DP. DRLD TO 5731 FT. TRIP TO REPLACE CRACKED DP. WIH. DRLD TO 5767 FT. TRIP TO REPLACE CRACK IN DP. START GIH. SURVEYS - 3 DEG AT 5718 FT. 1-3/4 DEG AT 5729 FT, 1 DEG AT 5749 FT. MUD 8.9, VIS 33, WL 16.6..

TOMBSTONE STATE-A WELL NO. 1 D 5851. DRLD TO 5851 FT, 84 FT. TRIP FOR CRACK IN DP. SURVEY - 1-1/2 DEG AT 5718 FT. MUD 8.8, VIS 31, WL 17..

TOMBSTONE STATE-A WELL NO. 1 D 5901. DRLD TO 5862 FT. TRIP FOR PUMP PRESS LOSS, FOUND WASH OUT IN BIT. WIH, DRLD TO 5901 FT. SURVEY -1-1/2 DEG AT 5880 FT. MUD 8.8. VIS 32, WL 17.5..

TOMBSTONE STATE-A WELL NO. 1 TD 6260. CIRC FOR SAMPLES. 5/23/81 -DRLD TO 6053 FT. 152 FT. SURVEY - 1-3/4 DEG AT 5973 FT. MUD 8.9, VIS 32. WL 18. 5/24/81 - DRLD TO 6061 FT. COOH. PRESS TSTD KELLY AND HYDRIL. LOST 100 PSI .- PU CORE BBL AND WIH. CORED FROM 6061-6093 FT. START COOH W/CORE NO. 3. SURVEY 3 DEG AT 6061 FT. MUD 8.9, VIS 31, WL 19. 5/25/81 - FIN COOH W/CORE NO. 3, REC 31 FT. LD CORE. WIH, REAMED 60 FT TO BTM. RESUMED DRLG TO 6157 FT. SURVEY - 2 DEG AT 6128 FT. MUD 8.9. VIS 31. WL 19. 5/26/81 DRLD TO 6260 FT, 103 FT. CIRC FOR SAMPLES FROM DRLG BREAK. SURVEY 2. DEG AT 6220 FT. MUD 8.9, VIS 31, WL 21...

TOMBSTONE STATE-A WELL NO. 1 D 6376. DRLD TO 6376 FT. 116 FT. SURVEY-2 DEG AT 6344 FT. MUD 9. VIS 34. WL 18.

TOMBSTONE STATE-A WELL NO. 1 D 6485. DRLD TO 6485 FT. SURVEY - 1 DEG AT 6435 FT. MUD 9, VIS 34, WL 16..

TOMBSTONE STATE-A WELL NO. 1 TD 6521. CORING. DRLD TO 6503 FT. 18 FT. CIRC. COOH. TSTD BOP, S, OK. WIH W/CORE BBL TO CUT CORE NO. 4. CUT 18 FT. SURVEY - 1 DEG AT 6503 FT. MUD 9.1, VIS 35, WL 15..

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May

TOMPSTONE STOLE-A WHIL NO. 1 D 4440. 5/2/81 - FIVISHED COUR. PD 5-374 IN DIAMOND BIT AND COLF PARLEL. WIH, CORED 14 IN IN 5-172 HES. COURT NO RECOVERY. PU PRA AND PITE VIB. DOLD 37 FT IN 6 HES. SURVEYS -1-374 DEG AT 4050 FT, 1 DEG AT 4055 FT. MID 8.8, VIS 31, M. 15. 5/3/81 - DRLD TO 4969 FT. 175 FT IN 23 HES. SCHOTTS - 1/2 DEC AT 4118 FT, 1 DEC AT 4149, 374 DEC AT 4129 FT A4D 1 DEC AT 4221 FT AND 4240 F1. SUD 8.9, VIS 33, EL 14. 5/4/81 - DELD 10 4440 F1, 178 F1 IN 23 HRS. SURVEYL - 1 DEC AT 4251 FT. 4302 FT. 4360 FT. 4373 FT AND 4424 FT. MUD 9.0, VIS 33, WL 15..

TOMPSTONE STATE-A WELL NO. 1 E 4606. DELD TO 4606 FT, 166 FT. SURVEYS - 1-172 DEG AT 4455 FT, 1-172 DEG AT4498 FT, PRC AT4579 FI. MUD 8.9, VIS 31, WL 16..

TOGRSTONE STATE-A WELL NO. 1 D 4733. DELD TO 4733 FT. 127 FT. SERVEYS - 1-1/4 DEC AT 4606 FT, 2 DEC AT 4662 FT, 2-1/2 DEC AT 4702 . MUD 8.9, VIS 31, WL 16..

TOMESTONE STATE-A WELL NO. 1 D 4889. DELD 10 4889 FT. 156 FT. EUEVEYS - 1-1/2 DEC AT 4713 F1, 2-1/2 DEG A1 4783 F1, 4763 F1, 4794 F1 AVD AP26 F1, 2 DEC AT 4837 F1, 2-172 TEC AT 4827 F1, 4FT 5.9. VIS 31, cL 17...

TOMBSTONE STATE-A WELL NO. 1 D 4976. DRLD TO 4976 FT. 87 FT. LOST 60 BBLS AT 4950 FT. SURVEYS - 2-1/2 DEG AT 4888 FT. 3 DEG AT 4919 FT. 2-1/2 DEG AT 4931 FT, 3 DEG AT 4962 FP. MUD 8.9, VIS 31, WL 17..

TOMBSTONE STATE-A WELL NO. 1 D 5205. 5/9/81 - DRLD TO 5010 FT, TRIP FOR BIT. TSTD BOP, S. WIH, DRLD TO 5017 FT, TRIP FOR HOLE IN DP, FOUND 1 JT DP 8 JTS ABOVE WT PIPE WITH HOLE IN BOTH ENDS. WIH. DRLD TO 5028 FT. SURVEYS - 3 DEG AT 4980 FT, 2-1/2 DEG AT 5010 FT. MUD 8.9, VIS 31, WL 18. 5/10/81 - DRLD TO 5109 FT, 81 FT. SURVEYS - 2 DEG AT 5020 FT, 2 DEG AT 5083 FT. MUD 8.9, VIS 34, WL 16.4.85/11/81 - DELD TO 5205 FT. 96 FT. TRIP FOR NEW BIT. LD 1 JT HVY WT DP. SURVEYS - 1-3/4 DEG AT 5153 FT, 1-1/2 DEG AT 5164 FT, 1-1/2 DEG AT 5195 FT. MUD 8.9, VIS

TOMBSTONE STATE-A WELL NO. 1 D 5272. DRLD TO 5248 FT. HAD PRESS LOSS, COOH. FOUND CRACKED BOX ON NO. 5 DC. WIH, DRLD TO 5272 FT. SURVEYS - 2-1/4 DEG AT 5205 FT, 2-1/4 DEG AT 5257 FT. MUD 8.9, VIS 32, WL 6-2--

TOMBSTONE STATE-A WELL NO. 1 D 5356. DRLD TO 5350 FT. COOH FOR PRESS LOSS. TELEDRIFT SUB CRACKED. PU IBS. WIH, DRLD TO 5356 FT. SURVEY - 2-1/4 DEG AT 5299 FT. MUD 8.9, VIS 33, WL 16.5..

TOMBSTONE STATE-A WELL NO. 1 TD 5405. MAGNAFLUXING DC.S. DRLD TO 5405 FT, 49 FT. COOH. SURVEYS - 3 DEG AT 5354 FT, 2-1/4 DEG AT 5405 FT. /4 MUD 8.8, VIS 31, WL 16..

TOMBSTONE STATE-A WELL NO. 1 D 5452. FIN PRESS TSTG BOP, S. WIH AND DRLD TO 5452 FT, 47 FT. SURVEYS - 2 DEG AT 5411 FT, 1-1/2 DEG AT 5442 FT. MUD 9.0, VIS 32, WL 16.6..

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NATURE OF WORK PERFORMED TUMBSTONE STATE-A WELL NO. 1 D 2139. 4/17/81 - RUN 1 IN, PUMP 182 SX CLASS G TO BRING CMT TO SURF. WOC. CUT OFF AND WELD ON HEAD. 4/18/81-#FLD ON HEAD AND NO. START NU POP. MUD 8.9, VIS 37, WL 14. 4/19/81 -FIN NU. PRESS TSTD BOP.S TO 2000 PSI, HYDRIL TO 1000 PSI. PO PHA, DROPPED TELEDRIFT IH. WIH W/OS, COOH, NO REC. WIH W/OS, COOH, NO REC. WU SMALLER CHAPPLES. MUD 8.9, VIS 37, WL 15. 4/20/81 - WIH W/OS, WORK OVER FISH. COOH. LD FISH AND FISHING TOOLS. MAKE UP BHA AND GIR, DRL OMT AND SHOE. DRLD TO 2121 FT. COOH, PU MAGNET AND JUNK SUB. GIH, WORR ON JUNK. COUH. LD MAGNET, REC PIN FROM HOLE OPENER. PU BIT, WIH, DRLD

TO 2139 FT. MUD 8.6, VIS 38, WL 18.. TOMPSTONE STATE-A WELL NO. 1 D 2330. DRLD TO 2330 FT. 191 FT. SURVEYS - 1/2 DEG AT 2188 FT, 1/2 DEG AT 2251 FT, 1/2 DEG AT 2318 FT. MUD 8.7, VIS 32, WL 26..

TOMBSTONE STATE-A WELL NO. 1 D 2487. DRLD TO 2344 FT. LOST 250 RBLS MUD. MIX LCM PILL. DRLD TO 2487 FT. SURVEYS - 1/2 DEG AT 2374 FT. 1/2 DEG AT 2434 FT. MUD 8.6, VIS 28, WL 30...

TOMBSTONE STATE-A WELL NO. 1 D 2658. DhLD TU 2658 FT. 171 F1. SURVEYS - 1/2 DEC AT 2526 FT, 1/2 DEC AT 2556 FT, 1/2 DEC AT 2587 FT, 1/2 DEG AT 2617 FT, 1/2 DEG AT 2629 FT. MUD 8.6, VIS 27, WL 36..

TOWBSTONE STATE-A WELL NO. 1 TD 2786. TRIP FOR HOLE IN DP. DHLD TO 2784 FT, LOST 150 LB PUMP PRESS COOH, CHECK BHA AND ALL TOOL JTS, NO LEAK. WIH, DRLD TO 2786 FT, LOST 800 LB PUMP PRESS. COOH, FOUND SPLIT IN 3RD JOINT DP 4 FT ABOVE PIN. SURVEYS - 1/2 DEG AT 2680 FT, 1/2 DEG AT 2741 FT. MUD 8.6, VIS 27, WL 50..

TOMBSTONE STATE-A WELL NO. 1 D 3310. 4/25/81 - DHLD TO 2984 FT. 198 FT. SURVEYS - 1/2 DEC AT 2830 FT, 1/2 DEC AT 2892 FT, 1/2 DEG AT 2960 FT. MUD 8.6, VIS 27, WL 75. 4/26/81 - DPLD TO 3059 FT, LOST 100 LB PRAP PRESS. COOH, FOUND CRACKED BOX ON 2ND DC. WIH, DBLD TO 3089 FI. LOST 200 LB PUMP PRESS. COOH, FOUND CRACK IN 12TH UT DP 34 IN PELOW BOX. WIH, DRLD TO 3115 FT. SURVEYS - 1/2 DEC AT 3046 FT, 1 DEC AT 3090 FT. MUD 8.6, VIS 27, WL 85. 4/27/81 - DELD 10 3310 FT, 195 FT. SURVEYS - 1/2 DEG AT 3177 FT, 1/2 DEG AT 3832 FT, 1/2 DEC AT 3264 F1. MUD 8.6. VIS 27..

TOMBSTONE STATE-A WELL NO. 1 D 3498. DELD TO 3498 FT. 188 FT. SUEVEY 28 1/2 DEG AT 3324 FT, 3356 FT, 3387 FT, 3418 FT AND 3479 FT, 1 DEG AT

3428 F1. MUD 8.6, VIS 47.. TOUBLATONE STATE-A WELL NO. 1 TO 3613. TRIPPING. DAILD TO 3583 FT. TRIP FOR RIT. MAGNAPLUX BHA. DRLD TO 3613 FT. LOST 200 LP PUMP PRESS. COOH, FOUND CHACKED JT DP IN SLIP AREA 5TH JT ABOVE DC, S. START GIH. SUBVETS - 1/2 DEG AT 3509 FT AND 3571 FT, 1 DEG AT 3540 FI, 374 DEG AT 3583 F1. MOD 8.6, VIS 27..

TOWNSTONE STATE-A WELL NO. 1 B 3848. WIH. DELD TO 3848 FT. 235 Fi. LOST POO LR POMP PRESS. COOM. PEPLD 9 JI DP WEVE WI DP. WIH, LUST 108 BEL HOD AT 3669 FT. SERVETS - 1 DEC AT 3636 FT. 1/2 DEG AT 3686 FT END 3708 FT, 370 DEC AT 3759 FT, 172 DEC AT 3810 FT AND 3840 FT. 400 8.6, VIS 27..

TOWRSTONE LIPTE-A WELL WO. 1 TO 4050. COOM. DELD TO 4050 FI. 202 Fi. WAY R. R. VIS 38, W. 14..

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TOMESTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE. REAMED TO 1047 FT, TRIP FOR PIT, REAMED TO 1172 FT. MUD 8.5, VIS 28..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE. REAMED TO 1347 FT, 175 FT. MUD 8.6, VIS 27..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. CIRC WO FISHING TOOLS. REAMED 26 IN HOLE TO 1449 FT. COOH, LEFT ONE HO CUTTER IN HOLE. PU 17-1/2 IN BIT. WIH TO 1507 FT, TAG FISH, CIRC WO FISHING TOOLS.

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE AT 1527.

4/4/81 - WO FISHING TOOLS. 4/5/81 - LD FISHING TLS. RAN JUNK BASKET.

COOH, NO RECOVERY. DROPPED 20 FT - 3/8 IN CHAIN IH WHILE RIGGING DN

TOOLS. KAN MAGNET, REC 2 FT OF CHAIN, RERAN MAGNET, REC 18 FT OF

CHAIN. RAN JUNK BASKET, REC CUTTER, LEFT IH CUTTER PIN. LD FISHING TOOLS

4/6/81 - PU BHA AND 26 IN HOLE OPENER, WASHED TO BIM AND STARTED

REAMING AT 1459 FT. HEAMED TO 1527 FT. MUD 8.6, VIS 29..

TOMESTONE STATE-A WELL NO. 1 TD 2117. REAMED 26 IN HOLE 15 FT 10 1542 FT. MUD 8.6, VIS 29, WL 45..

TOMESTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE AT 1544 F1. COOH TO DRESS HOLE OPEWER. WIH. COND MUD. COOH. RAN MAGNET, NO RECOVERS. FOUND SHOCK SUB ROTATING. WIE W/HOLE OPENER. MID 8.6, VIS 35, WL 15..

TOMBSTONE STATE-A WELL NO: 1 TD 2117. TRIPPING FOR RIT. COOH, FOUND SHOCK SUB ROTATING. WIH, DELD TO 1647 FT. COOH FOR RIT CHG. MUD 8.9, VIS 38, WL 11.8..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. EMG 26 IN HOLE. FIN GIH AND REAMED TO 1785 FT. MUD 9.1. VIS 38. WL 12.8..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. HMG 26 IN HOLE. 4/11/81 - HEAMED TO 1876 FT, 91 FT. MUD 9.1, VIS 38, WL 12.6. 4/12/81 - REAMED TO 1926 FT, 50 FT. MUD 9.2, VIS 38, WL 12.5 4/13/81 - REAMED TO 2022 FT, 96 FT. MUD 9.1, VIS 35, WL 13.2..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. PUMPING DIACEL D.SGZ. DELD TO 12078 F1, LOST 400 BBL MUD. PUMP LCM PILL. DRLD TO 2097 FT. LOST CIRC. PUMP DIACEL D SGZ. MUD 8.8. VIS 32. WL 16..

TOMESTONE STATE-A WELL NO. 1 TD 2116. HUNNING 20 IN CSG. REAMED 26 IN HOLE TO 2116 FT. CIRC AND COND HOLE. SPOT LCM PILL. COOH. PRO TO HUN CSG. START RNG 20 IN CSG. MUD 8.9, VIS 37, WL 12.8..

TOMBSTONE STATE-A WELL NO. 1 TD 2116. FIN RNG 20 IN CSG /50 JTS/
SET AT 2116 FT. WIH W/DP. RU HOWCO. CIRC HOLE. MIXED AND PMPD 250 SX
SPENALITE CMT. SEAL WASHED OUT ON DP STINGER. CIRC OUT CMT OUTSIDE
CSG. CIRC CMT OUT DP/CSG ANNULUS. COOH W/DP. CMTD CSG CONVENTIONALLY
W/1500 GAL FLOCHER, 20 RW. FOLLOWED BY 460 SX SPERALITE CMT W/50
LB/SX SPENALITE, 4 PEPCENT GEL, 5 PERCENT LIME, 1 PERCENT CFR-2,
1/2 PERCENT HALAD 22-A, FOLLOWED BY 590 SX CLASS G. DISPLD W/3981
CU FT MUD. BMPD PLUG W/500 PSI. LOST ALL RETURNS ON LAST 10 BALS.
PREP TO RUN 1 IN OUTSIDE CSG. MUD 8.9, VIS 35, WL 13.6..

Form 911 1-69 Printed in U.S.A.

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DAILY REPORT DETAILED

APR 9 1981

0 & G CONS. COMM.

LEASE TOMBSTONE STATE-A Well #1 TOTAL DATE DEPTH NATURE OF WORK PERFORMED TOMBSTONE STATE-A WELL NO. 1 D 1866. DRLD TO 1172 FI. MIX AND PLMP Mar. 13 LCM PILL. THIP FOR HOLE IN DF. DHLD TO 1215 FT. MIX AND PUMP LCM PILL. DRLD TO 1266 FT. SURVEYS - 3/4 DEG AT 1066 FT, 1/2 DEG AT 1128 FT, 3/4 DEG AT 1188 FT. MUD 8.6, VIS 26.. TOMBSTONE STATE-A WELL NO. 1 D 1848. 3/14/81 - DRLD TO 1475 FT. 209 FT. START OOH FOR NEW BIT. SURVEYS - 3/4 DEG AT 1251 FT. 3/4 DEG 14-16 AT 1313 FT, 1/2 DEG AT 1404 FT, 3/4 DEG AT 1430 FT. MUD 8.5, VIS 27, WL 75. 3/15/81 - FIN TRIP FOR NEW BIT AND DRLD TO 1686 FT. 211 FT. SURVEYS - 1 DEG AT 1494 FT, 3/4 DEG AT 1577 FT, 1 DEG AT 1617 FT. MUD 8.5, VIS 27, WL 70. 3/16/81 - DRLD TO 1848 FT, 162 FT. SURVEYS -3/4 DEG AT 1678 FT, 1 DEG AT 1740 FT, 1 DEG AT 1800 FT, LOST 50 BBL MUD AT 1775 FT. MUD 8.6, VIS 28, WL 100.. TOMBSTONE STATE-A WELL NO. 1 TD 1982. GIH. DRLD TO 1982 FT. 134 FT. LOST PUMP PRESS. COOH. TWISTED PIN OFF DC. PU OS, BUMPER SUB AND JARS AND START IH. SURVEYS - 3/4 DEG AT 1866 FT, 1 DEG AT 1921 FT. 17 MUD 8.6, VIS 27, WL 100.. TOMBSTONE STATE-A WELL NO. 1 D 2037. PU OS, JARS AND BUMPER SUB. WIH, PU FISH. COOH W/FISH. LD FISH AND TOOLS. WIH W/BIT. DRLD TO 18 2037 FT, 55 FT. SURVEY - 3/4 DEG AT 1983 FT. MUD 8.5, VIS 28, WL TOMESTONE STATE-A WELL NO. 1 TD 2118. LOGGING. DELD TO 2118 FT. SURVEYS - 3/4 DEG AT 2045 FT, 1 DEG AT 2118 FT. CIRC HOLE. MADE 10 19 STD SHORT TRIP, HAD 20 FT FILL. CIRC AND PUMP GFL SWEEP. COOH. RU SCHL., RUN DIL-SONIC. MUD 8.5, VIS 29, WL 75.. TOMBSTONE STATE-A WELL NO. 1 TD 2118. LOGGING. 10-1/2 HRS DOWNTIME 20 WAITING ON REPLACEMENT LOGGING EQUIPMENT. MUD 8.4, VIS 27, WL 100.. TOMBSTONE STATE-A WELL NO. 1 TD 2118. REAMING. 3/21/81 - FIN HAG LOGS. RD SCHL. PU BHA. REAMED 12-1/4 IN TO 17-1/2 IN FROM 70 FT TO 1098 F1. MUD 8.4, VIS 27. 3/22/81 - REAMED TO 1507 FT. THIP FOR NEW BIT, REAMED TO 1804 FI. MUD 8.5, VIS 28, WL 100. 3/23/81 - REAMED 12-21-23 1/4 IN TO 17-1/2 TO 2006 FT. MUD 8.5, VIS 28.. TOMBSTONE STATE-A WELL NO. 1 TD 2117. FIN OPENING 17-1/2 IN HOLE TO 2117 FT. PU 26 IN HOLE OPENER. NOW OPENING 17-1/2 IN HOLE TO 26 IN AT 75 F1. MUD 8.5, VIS 28.. TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE. REAMED 17-1/2 IN TO 26 IN FROM 75 FT TO 241 FT. MUD 8.5. VIS 27.. 25

26

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE. REAMED TO 302 FT. TRIP FOR BIT. REAMED TO 376 FT. MUD 8.5. VIS 27..

27

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMED 26 IN HOLE TO 477 FT. MUD 8.5, VIS 28..

28-30

TOMESTONE STATE-A WELL NO. 1 TD 2117. HEAMING 26 IN HOLE. 3/28/81 - REAMED HOLE TO 509 FT. COOH. MAGNAFLUX BHA. WIH WYNEW REAMEH, RFAMED TO 545 FT. MUD 8.5, VIS 28. 3/29/81 - REAMED TO 675 FT. MUD 8.5, VIS 28.

TOMBSTONE STATE-A WELL NO. 1 TD 2117. RFAMED HOLE TO 986 FT. MUD

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LEASE TOMBSTONE STATE-A Well #1 WELL NO.

DAILY REPORT DETAILED

TOTAL DATE DEPTH NATURE OF WORK PERFORMED

TOMBSTONE STATE-A WELL NO. 1 D 1266. DRLD TO 1172 F1. MIX AND PLMP LCM PILL. TRIP FOR HOLE IN DP. DRLD TO 1215 FT. MIX AND PIMP LCM PILL. DRLD TO 1266 FT. SURVEYS - 3/4 DEG AT 1066 FT, 1/2 DEG AT 1128 FT, 3/4 DEG AT 1188 FT. MUD 8.6, VIS 26.

TOMBSIONE STATE-A WELL NO. 1 D 1848. 3/14/81 - DRLD TO 1475 FT, 209 FT. START OOH FOR NEW BIT. SURVEYS - 3/4 DEG AT 1251 FT, 3/4 DEG AT 1313 FT, 1/2 DEG AT 1404 FT, 3/4 DEG AT 1430 FT. MUD 8.5, VIS 27, WL 75. 3/15/81 - FIN TRIP FOR NEW BIT AND DRLD TO 1686 FT, 211 FT. SURVEYS - 1 DEG AT 1494 FT, 3/4 DEG AT 1577 FT, 1 DEG AT 1617 FT. MUD 8.5, VIS 27, WL 70. 3/16/81 - DRLD TO 1848 FT, 162 FT. SURVEYS -3/4 DEG AT 1678 FT, 1 DEG AT 1740 FT, 1 DEG AT 1800 FT. LOST 50 BBL MUD AT 1775 FT. MUD 8.6, VIS 28, WL 100..

TOMBSTONE STATE-A WELL NO. 1 TD 1982. GIH. DRLD TO 1982 FT, 134 FT. LOST PUMP PRESS. COOH. TWISTED PIN OFF DC. PU OS, BUMPER SUB AND JARS AND START IH. SURVEYS - 3/4 DEG AT 1866 FT, 1 DEG AT 1921 FT. MUD 8.6, VIS 27, WL 100..

TOMBSTONE STATE-A WELL NO. 1 D 2037. PU OS, JARS AND BUMPER SUB. WIH, PU FISH. COOH W/FISH. LD FISH AND TOOLS. WIH W/BIT. DRLD TO 2037 FT, 55 FT. SURVEY - 3/4 DEG AT 1983 FT. MUD 8.5, VIS 28, WL

TOMBSTONE STATE-A WELL NO. 1 TD 2118. LOGGING. DRLD TO 2118 FT. SURVEYS - 3/4 DEG AT 2045 FT, 1 DEG AT 2118 FT. CIRC HOLE. MADE 10 STD SHORT TRIP, HAD 20 FT FILL. CIRC AND PUMP GFL SWEEP. COOH. RU SCHL., RUN DIL-SONIC. MUD 8.5, VIS 29, WL 75..

TOMBSTONE STATE-A WELL NO. 1 TD 2118. LOGGING. 10-1/2 HRS DOWNTIME WAITING ON REPLACEMENT LOGGING EQUIPMENT. MUD 8.4, VIS 27, WL 100..

TOMBSTONE STATE-A WELL NO. 1 TD 2118. REAWING. 3/21/81 - FIN ENG LOGS. RD SCHL. PU BHA. REAMED 12-1/4 IN TO 17-1/2 IN FROM 70 FT TO 1098 F1. MUD 8.4, VIS 27. 3/22/81 - REAMED TO 1507 FT. TRIP FOR NEW BIT, REAMED TO 1804 FI. MUD 8.5, VIS 28, WL 100. 3/23/81 - REAMED 12-1/4 IN TO 17-1/2 TO 2006 FT. MUD 8.5, VIS 28..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. FIN OPENING 17-1/2 IN HOLE TO 2117 FT. PU 26 IN HOLE OPENER. NOW OPENING 17-1/2 IN HOLE TO 26 IN AT 75 F1. MUD 8.5, VIS 28..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. HEAMING 26 IN HOLE. REAMED 17-1/2 IN TO 26 IN FROM 75 FT TO 241 FT. MUD 8.5, VIS 27..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMING 26 IN HOLE. REAMED TO 302 FT. TRIP FOR BIT. REAMED TO 376 FT. MUD 8.5, VIS 27..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMED 26 IN HOLE TO 477 FT. MUD 8.5, VIS 28...

TOMBSTONE STATE-A WELL, NO. 1 TD 2117. REAMING 26 IN HOLE. 3/28/81 -HEAMED HOLE TO 509 FT. COOH. MAGNAFLUX BHA. WIH WANEW REAMER, REAMED TO 545 FT. MUD 8.5, VIS 28. 3/29/81 - REAMED TO 675 FT. MUD 8.5, VIS 28. 3/30-81 - REAMED TO 795 FT. MUD 8.5, VIS 28..

TOMBSTONE STATE-A WELL NO. 1 TD 2117. REAMED HOLE TO 986 FT. MUD 3/ Form 11 8.6, VIS 25...

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LEASE TOMBSTONE STATE-A Well #1 WELL NO.

DATE DEPTH NATURE OF WORK PERFORMED 1981 Feb

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TOMBSTONE STATE-A WELL NO. 1 INITIAL REPORT. 2/23/81 - MI AND HURT. LOCATION COMPLETE. CRANE TO BEGIN UNLOADING TRUCKS WITH RIG EQUIPMENT TODAY. RAT HOLE COMPLETE. WATER WELL DRILLING AT 580 FT. AFE P-Y011 ISSUED TO DRILL AND COMPLETE 20,000 FT PALEOZOIC OIL WELL. LOCATION -600 FT FWL AND 850 FT FSL, SW SW, SEC. 14-T205-R23E, COCHISE CO., ARIZONA. ELEV. 4726.30 FT GR. SUB AREA CODE 20. LOCATION STAKED 12/28/80 BY CLARENCE 5. WILCOX, CIVIL ENGINEER. PARKER DRILLING, RIG NO. 166. CONTRACTOR. API NUMBER 02-003-20005..

TOMBSTONE STATE-A WELL NO.LOCATION 100 PERCENT COMPLETE. WATER WELL DRLG AT 655 FT. FIRST LOAD OF RIG EQUIPMENT ON LOCATION. PREPARING TO RIG UP. .

TOMBSTONE STATE-A WELL NO. 1 MI AND RURT. WATER WELL DRILLING AT 693 FT..

TOMBSTONE STATE-A WELL NO. 1 MI AND RURT. WATER WELL AT 760 FT. PREP TO LOG WELL. ELEVEN TRUCK LOADS OF RIG EQUIPMENT ARRIVED YESTERDAY . .

TOMBSTONE STATE-A WELL NO. 1 MI AND RURT. WATER WELL AT 797 FT. WATER WELL LOGGED. PREP TO REAM TO 17-1/2 IN..

TOMBSTONE STATE-A WELL NO. 1 2/28/81 THRU 3/2/81 - BURT. REAMING WTR WELL TO 17-1/2 IN..

TOMBSTONE STATE-A WELL NO. 1 MI AND RURT. SHOULD RAISE DERRICK THIS PM. WTR WELL RMG AT 200 FT...

TOMBSTONE STATE-A WELL NO. 1 RURT. RAISED DERRICK YESTERDAY. WATER WELL REAMING AT 265 FT..

TOMBSTONE STATE-A WELL NO. 1 RURT. HAULING WTR UNTIL WTR WELL COMPLETE. WTR WELL RMG AT 330 FT..

TOMBSTONE STATE-A WELL NO. I RUHT. PROBABLY BREAK TOWER TONIGHT AND SPUD TOMORROW. WTR WELL RMG AT 370 FT..

TOMBSTONE STATE-A WELL NO. 1 D 312. 3/7/81 - RURT. BROKE TOWER YESTERDAY PM. WTR WELL RMG AT 400 FT. 1000 BW HAULED. 3/8/81 - RURT. WTR WELL AT 482 FT. 3/9/81 - FIN RURT. SPUDDED 12-1/4 IN SURF HOLE AT 6/30 AM, 3/8/81 AND DRLD TO 312 FT. SURVEYS - 1/4 DEG AT 72 FT. 1/4 DEG AT 110 FT, 1/4 DEG AT 141 FT, 3/4 DEG AT 200 FT, 1/2 DEG AT 230 FT, 1/4 DEG AT 259 FT, 1/2 DEG AT 292 FT. MUD 8.4, VIS 27. DRLG W/WTR..

TOARSTONE STATE-A WELL NO. 1 D 580. DRLD TO 437 FT. TRIP FOR BIT. RESUMED DRLG TO 580 FT. SURVEYS - 1/2 DEG AT 354 FT, 3/4 DEG AT 417 FT, 1/4 DEG AT 480 FT, 3/4 DEG AT 541 FT. DRLG W/WTR..

TOMBSTONE STATE-A WELL NO. 1 D 778. DRLD TO 707 FT. LOST 300 PSI PP. COOH, COULD FIND NO LEAK. PU NEW BIT. TIH, LOW PP. CHECKED PUMPS, OK. COOH. FOUND CRACK IN BIM JT DP 2 FT ABOVE PIN. REPLACED JT. TIH, RESIMED DRLG TO 778 FT. SURVEYS - 3/4 DEG AT 605 FT. 3/4 DEG AT 690 FT. GRD ELEV. 4726 FT. PAB ELEV. 4759 FT. MUD 8.6, VIS 27..

TOMBSTONE STATE-A WELL NO. 1 D 1023. DRLD TO 1010 FT, LOST 150 BPLS /2 MUD. MIXED LCM, DRLD TO 1023 FT. SURVEYS - 3/4 DEG AT 758 FT, 3/4 Form 91 DEG AT 942 FT. MUD 8.6, VIS 26...

APPLICATION FOR PERMIT TO DRILL OR RE-REFER RE-ENTER OLD WELL [] APPLICATION TO DRILL () Phillips Petroleum Company
NAME OF COMPANY OR OPERATOR P.O. Box 2920 Wyoming 82602 <u>Casper</u> Parker Drilling Company Denver National Bank Bldg., Suite 1620, Denver, DESCRIPTION OF WELL AND LEASE Elevation (ground) Federal, Sit ie or Indian Lease Number, or if fee lease, name of lessor 4726.30 State Lease #51662 N&L Distance from proposed location to nearest drilling, completed or applied—for well on the same lease: Nearest distance from proposed location to property or lease line: None on this Lease 600 feet Number of wells on lease, including this well, completed in or drilling to this reservoir: Number of acres in lease: 480 If lease, purchased with one or more wells drilled, from whom purchased: Address Name BO acres 6/2 of 5/4 Well location (give footage from section lines) Section-township-range or block and survey 600' from W. Line, 850' from S. line <u>14-20S-23E G&SRB&M</u> Field and reservoir (if wildcat, so state) <u>Cochise</u> <u>Wildcat</u> Distance, in miles, and direction from nearest town or post office 5 miles south Tombstone Approx. date work will start Rotary or cable tools Proposed depth: January 12, 1981 20,000 Rotary Filing Fee of \$25.00 Organization Report Bond Status On file Attached \$25,000 Amount Remarks: Well Information Confidential CERTIFICATE: I, the undersigned, under the penalty of perjury, that I am the Operations Superintendent Phillips Petroleum Company
(company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

2 - Arizona 0&G CC

1 - Bartlesville Prod.

Signature D. Jt Fisher 1 - T. J. Jobin, Denver January 8, 1981 1 - File 716 Perinit Number STATE OF ARIZONA 1-9-81 Approval Date: OIL & GAS CONSERVATION COMMISSION

Form No. 3

Application to Drill or Re-enter

File Two Copies

(Complete Reverse Side)

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Approved By:

Notice: Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

<u>Oreverse</u>

- 1. Operator shall outline the dedicated acreage for both oil and gas wells on the plat.
- 2. A registered professional engineer or land surveyor registered in the State of Arizona or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
- 3. All distances shown on the plat must be from the outer boundaries of the Section.
- 4. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES\_\_\_\_\_NO\_\_X
- 6. If the anr ver to question four is "no," list all the owners and their respective interests below:

Owner Texoma Producing Company	Land Description 1/3 working interest
Anschutz Corporation	1/3 working interest
	CERTIFICATION
	I hereby certify that the information above is true and complete to the best of my knowledge and belief.  Name  D.J. Fisher  Position Operations Superintendent Company Phillips Petroleum Co.
14	Date 1/8/81
	I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.
	Plat Attached  Date Surveyed
<b>85</b> 0'	Registered Professional Engineer and/or Land Surveyor
o 330 660 990 1320 1650 1980 2310 2640 2000 1	1500 1000 500 0 Certificate No.

PROPOSED CASING PROGRAM

Ig Weight Grade & Type Top Bottom Cer

Size of Casing 30" 20"	Weight 109#	Grade & Type PEEW K-55 ST&C	Surf Surf	Bottom 200' 1200'	Cementing Depths 0 - 200' 0 - 1200'	Sacks Cement AS Required AS Required
13-3/8-13-1/2 13-5/8	72-81.4 88.2	SS-95 BUTT	Surf	10,000'	5 - 10,000 ST	As Required
9-5/8-9-7/8	53 5 -	L-80	Surf	15,000'	10 - 15,00 ST	As Required
7"	62.8 38	SS-99-3105	Surf	20,000	15 - 20,000EST	As Required

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NOTE: SET STAKES 200 FEET FROM WELL SITE IN CARDINAL DIRECTIONS. FOUND GLO-BEM 1/4 COR. . \_ \_ 200' \_ \_ 0 \_ \_ 200' \_ \_ . SET "1"x 15" REBAR MARKED PE-1270 WELL SITE ELEVATION 4726.30 SCALE 1" = 200' BM 4757 100 600' SET "L" XIS" REBAR FOUND FOUND MARKED PE-1270 GLO-BCM GLO-BCM SEC. COR.

WELL SITE LOCATED IN SW14 of SW14
SEC. 14, T-20-5, R-23-E, GASRBAM, COCHISE
COUNTY, ARIZONA.

I hereby certify that the well location shown on this plat was plotted from field notes of actual survey made by me, and that the same is true and correct to the best of my knowledge and belief. Surveyed 12-28-80.

Clarence S. Wilcox Registered Engineer # 1270

Communical Communication of the communication of th

CLARENCE S. WILCOX
CIVIL ENGINEER
P.O. BOX 4452
HUACHUCA CITY, AZ 85616

1270

WILCOX

PIZONA, U

Phillips Petroleum Co.

/ Lay Mtn 8  $\widetilde{\circ}$ 





# PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION, STATE OF ARIZONA,

• • • • • • • • • • • • • • • • • • •	PHILLIPS PETROLEUM COMPANY
То:	(OPERATOR)
	to drill a well to be known as
	TOMESTONE STATE A-1
	850' FROM SOUTH LINE, 600' FROM WEST LINE (SW45W4)
located	
Section	14 Township 20 S Range 23 E COCHISE County, Arizona.
The	W/2 OF SW/4of said
	ownship and Range is dedicated to this well.
	well is to be drilled substantially as outlined in the attached Application and must be drilled applicable laws, statutes, rules and regulations of the State of Arizona.
Issue	d this 9th day of JANUARY , 1981
YOU MUST 105, SECTION	EING ALLOWED TO PRODUCE THIS WELL BE IN FULL COMPLIANCE WITH HULE N A THRU G (SHACING), WITH HESPECT DUCT TO BE PRODUCED.  OIL AND GAS CONSERVATION COMMISSION  By White Secretary

PERMIT

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RECEIPT NO. 1982 API NO. 02-003-20005 State of Arizona
Oil & Gas Conservation Commission

Permit to Drill

FORM NO. 27

TEN FOOT SAMPLES ARE REQUIRED FROM SURFACE

PHILLIPS PETROLEUM COMPANY BARTLESVILLE OXLAHOMA 74004

DESCRIPTION

Drilling Permit Filing Fee - \$25.00

ξ,

SW1/4 of SW1/4 Sec. 14-20S-23E Cochise County, Arizona State Lease #51662 N&L

CHARGE: Tombstone State-A #1 AFE P-Y011

LEDGER LOC. EMPLOYEENO. CL.

THE ATTACHED DRAFT IS IN FULL PAYMENT OF ITEMS STATED ABOVE. ENDORSEMENT MUST BE IDENTICAL WITH THE PAYEE DESIGNATED. DETACH BEFORE DEPOSITING AND RETAIN FOR YOUR FILES. FORM 9004-03 3-79

Re: Oil and Gas Potential - Activity in Cochise County, AZ

<u>.</u>

Subject: Re: Oil and Gas Potential - Activity in Cochise County, AZ

Date: Mon, 16 Oct 2000 15:40:57 -0700

From: Steve Rauzi <Rauzi\_Steve@pop.state.az.us>
To: "Robinson, Charles E.D." <robinsc2@bp.com>

Larry,

Charles,

I have no record of any wells drilled in 19s-23e but Phillips drilled the <u>1A</u> Tombstone State in 14-20s-23e to a depth of 10561 ft in 1981. The well was planned to go to 20,000 ft but they got stuck it was abandoned early with a big fish in the hole. I'd have to look at the well file for the exact particulars but as I recall the Phillips well entered Cretaceous went through some granite or quartzite and back into Cretaceous where it was plugged. As a result, the Phillips well did not test the underlying (if present) Paleozoic rocks. In 1963, Mountain States Exploration drilled through ~1000 ft of black Cretaceous shale in its 1A state in 29-19s-18e.

Kenneth Smith, geologist with Continental Oil Co. (at the time), reported scattered oil shows in dense to fairly porous limestone, with poor to fair fluorescence and cut between 2195-2655 ft and 450 ft of oil cut mud in a DST of the interval 2570-90 ft in the nearby Southwest Oil Company 1 Davis-Clark in 5-21s-24e. The Southwest well was drilled in 1958.

I believe there is higher-risk potential (higher risk but bigger potential) in southeast Arizona where Paleozoic rocks of the Pedregosa Basin and Cretaceous rocks of the Bisbee Basin are preserved in down-faulted graben in this area.

I have attached a few references about southeastern Arizona. You may also find OG-6, OG-10, OG-12, and OG-24 of intertest. Information about these may be found at <a href="http://www.azgs.state.az.us/azgs-pubs-oil.htm">http://www.azgs.state.az.us/azgs-pubs-oil.htm</a>. I could fax Mr. Smith's letter to you if you are interested.

Steve

Oil & Gas Administrator 416 W. Congress #100 Tucson AZ 85701 520-770-3500 fax 520-770-3505

"Robinson, Charles E.D." wrote:

> Steve --> > I was g

> I was given your name by geologist Bill Auby, at the BLM. Are you aware of > any oil and gas activity in Cochise County? Bill advised me that the BLM

> had issued some oil and gas leases in 1998 in the area of 195-23E and

> 205-23E. Geologically speaking, in your opinion is there any potential in

> this area for oil and gas? Have any papers or articles been published on

> this subject?

> Thanks for your input.

> Charles Robinson

> BP Amoco

> 281 366-3472

<u>]Pedregosa.doc</u>

Name: Pedregosa.doc

Type: Microsoft Word Document (application/msword)

Encoding: base64

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Oil and Gas Potential - Activity in Cochise County, AZ

Subject: Oil and Gas Potential - Activity in Cochise County, AZ

Date: Tue, 10 Oct 2000 11:07:18 -0500

From: "Robinson, Charles E.D." <robinsc2@bp.com>

To: "Rauzi\_Steve@pop.state.az.us" <Rauzi\_Steve@pop.state.az.us>

Steve -

I was given your name by geologist Bill Auby, at the BLM. Are you aware of any oil and gas activity in Cochise County? Bill advised me that the BLM had issued some oil and gas leases in 1998 in the area of 195-23E and 205-23E. Geologically speaking, in your opinion is there any potential in this area for oil and gas? Have any papers or articles been published on this subject?

Thanks for your input.

Charles Robinson BP Amoco 281 366-3472

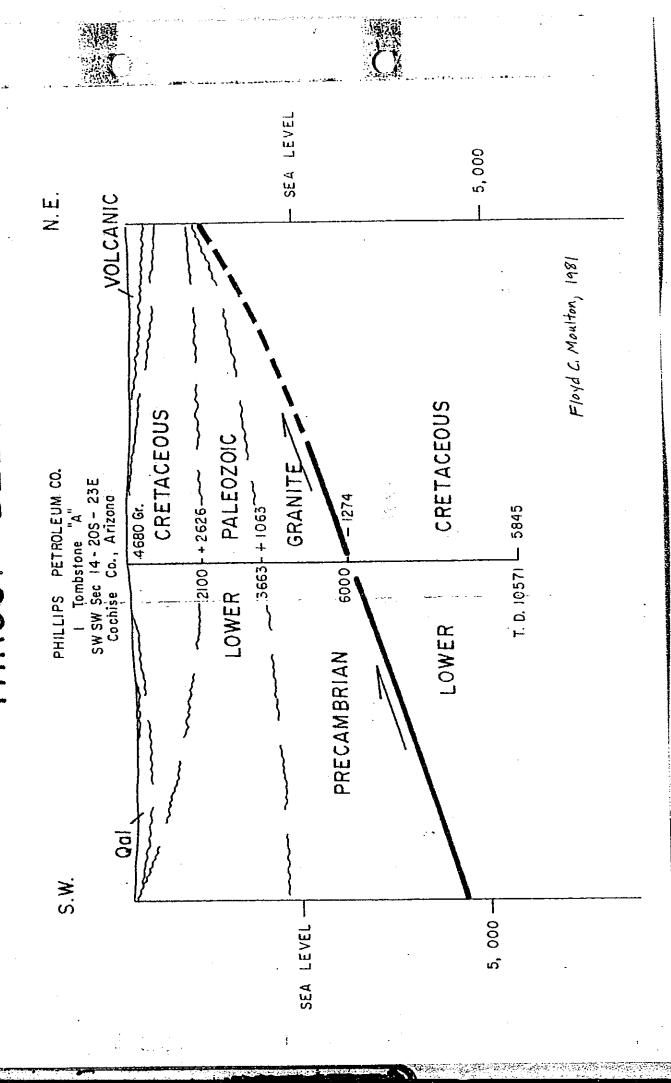
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# SOUTHEASTERN ARIZONA THRUST BELT

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# Arizor

State of Arizona

# Arizona Geological Survey

416 W. Congress, Suite 100 Tucson, Arizona 85701 (520) 770-3500



Larry D. Fellows Director and State Geologist

file 716

April 1, 1996

Mr. Alan Byron Byron Oil Industries 1302 Clarkson Clayton Center Ballwin, MO 63011

Dear Mr. Byron:

The information we talked about this morning is enclosed. This information supplements the articles by Keith and Reif & Robinson previously sent and includes

(1) selected references on the overthrust play in Arizona,

(2) list of our oil & gas publications,

(3) completion report and condensed mud log for Phillips Tombstone well,

(4) Moulton's (?) SW-NE cross-section through the Phillips Tombstone well,

(5) Kenneth Smith's memo about oil-cut mud in the Southwest Oil well,

(6) 1976 article on Jurassic salt of hingeline area by Hansen,

(7) 1980 article on Utah-Arizona overthrust by Hansen, Moulton, and Owings,

(8) Moulton's resume,

(9) Cochise County well location map, and

(10) my March 1995 summary of oil and gas potential in Arizona.

As I noted this morning, Ed Heylmun (local consulting geologist) pointed out a nw-trending lineament on landsat imagery that passes through the Phillips well, the Southwest Oil well, and the Double Adobe area of southern Springs Valley. Ed's phone number is (520) 327-3980 in case your interested in his take on the significance of this lineament and potential for oil and gas in southeastern Arizona.

Let me know if I may be of further assistance.

Sincerely,

Steven L. Rauzi

Oil and Gas Program Administrator

Steven L. Rais

**Enclosures** 

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Fife Symington

# State of Arizona Arizona Geological Survey

845 North Park Avenue, #100 Tucson, Arizona 85719 (602) 882-4795

Larry D. Fellows Director and State Geologist

March 23, 1992

file 716

Mr. Dub Ruberts Shell Western, Room 5222WCK P. O. Box 4252 Houston, Texas 77077-4252

Dear Mr. Ruberts:

Enclosed is the information you requested this morning, the well history of the Phillips Tombstone State A #1, State permit #716.

Let me know if I can provide you with any additional information.

Sincerely,

Steven L. Rauzi

Oil and Gas Program Administrator

Steven L. Ranis

Enclosure



OFFICE OF

RECEIVED
APR 25 1984
0 & G CONS. COMM.

## Gil und Gas Conservation Commission

STATE OF ARIZONA

1645 WEST JEFFERSON, SUITE 420 PHOENIX, ARIZONA 85007 PHONE: (602) 255-5161

April 17, 1984

Mr. Jon Goldstein Rocky Mountain Well Log Service P. O. Drawer 3150 Denver, Colorado 80201

Re: Phillips Petroleum Company Tombstone State A-1 Sec. 14, T.20S., R.23E. Cochise County, Arizona

ENCLOSED PLEASE FIND COPIES OF THE FOLLOWING:

1 each DIL, BHCS, CNFD, Runs #1 & #2, - 3/14/81 & 8/7/81

1 each Mudlog

PLEASE ACKNOWLEDGE RECEIPT BY SIGNING AND RETURNING THE ENCLOSED COPY TO THE ABOVE ADDRESS.

Thank you.

Sheile Burger

Sheila Burgan Enforcement Section

RECEIVED BY: Jon Goldstein 1888

Returned 4-25-84

C

EXPLORATION AND PRODUCTION GROUP

DENVER, COLORADO 80237 8055 EAST TUFTS AVENUE PARKWAY

	DATA TRANSMITTAL 13 april 1984
то:	OIL AND GAS CONSERVATION COMMISSION STATE OF ARIZONA 1645 West Jefferson, Suite 420 Phoenix, Arizona 85007 RE: Philips Patroleum Attn: Sheila Burgan  Dombstone Data A-1  Dec 14-205 23 E  Cychise County, Minora
ENCL	OSED PLEASE FIND COPIES OF THE FOLLOWING:
	1 Approved Well Permit 2 Core Analysis/Core Description 3 DST Chart/DST Report # 4 Fluid Analysis (Gas, Water, Oil) 5 Geological Prognosis and Drilling Program 6 Geological Well Report 7 Survey Plat 8 Well Completion Report 9 Well History 10 Well Permit Application 11 LOGS (Field Prints) RUN # DATE:
ABO'	ASE ACKNOWLEDGE RECEIPT BY SIGNING AND RETURNING THE ENCLOSED COPY TO THE VE ADDRESS. THANK YOU.  R. M. Coffeit  Director, Development Geology, Western Division  DATE: 4-16-84

March 12, 1984

Mr. John Goldstein Rocky Mountain Well Log Service P. O. Box 3150 Denver, Colorado §80201

Dear John:

I am mailing you copies of the logs we have on Phillips Petroleum's Douglas A-1 State well, Sec. 14, T-235, R-29E. At the present time, this is the only well on which we have duplicate copies of the logs.

I have written to Phillips requesting duplicates on their Tombstone A-1 State well. As soon as I receive these I will send them to you. The only log we received on the Bedrock Oil #1 State well was a Lithologic log. If you are interested in this, let me know and I will contact Bedrock for a duplicate. As I told you on the telephone last week, very few of the older wells in the state have logs and such is the case with the Ari-Tex #1 Goins well.

If I can be of any further assistance to you, please do not hesitate to call me.

Sincerely,

Sheila Burgan Secretary Enforcement Section

March 12, 1984

Ms. Pat Bertuzzi Phillips Petroleum Company Greenwood Plaza 7800 East Dorado Place Englewood, Colorado 80111

Re: Phillips Petroleum Tombstone A-1 State Sec. 14, T-20S, R-23E, SW SW Permit Number 716

Dear Pat:

In a review of my files, I find that we do not have a duplicate set of well logs for the above referenced well. We have recently had a request for copies of the logs on this well from Rocky Mountain Well Log Service.

Would you please send a complete set of logs on this well at your earliest convenience.

Thank you for your cooperation.

Sincerely,

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Sheila Burgan Secretary Enforcement Section

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May 18, 1982

CHEMBES!

Mr. Robert L. Doty Cities Service Company Energy Resources Group P.O. Box 1919 Midland, Texas 79702

Re:

Phillips Petroleum 1 State-A (Anschutz Texoma 1-10-2 State) Section 2, 7S-10E Pinal County, AZ State Permit No. 702 Phillips Petroleum Tombstone 1 State-A Section 14, 20S-23E Cochise County, AZ State Permit No.

Dear Mr. Doty:

This is to acknowledge receipt of your letter of May 10, 1982 pertaining to the subject Phillips Petroleum wells.

Please be advised that this Commission does not have the capacity for reproductions of well logs and therefore company representatives have always come to the Commission offices to study such files and make their own determination as to what part of the files they would like reproduced. The reproduction can be done by a local company after satisfactory credit has been established.

Sincerely,

A. K. Doss Executive Director

AKD/vb

ENERGY STATE

CITIES SERVICE COMPANY ENERGY RESOURCES GROUP



MAY 12 1982 0 & G CONS. COMM.

Box 1919 Midland, Texas 79702 (915) 685-5600

May 10, 1982

State of Arizona Oil and Gas Conservation Commission 1645 W. Jefferson, Suite 420 Phoenix, Arizona 85007

Dear Sirs:

I wish to request any information released on two wells drilled in Arizona:

Anschutz Corporation 1-10-2 State Anschutz Section 2, 7S- 10E Pinal County, AZ

Phillips Petroleum Company 1-A-Tombstone St. Section 14, 20S-23E Cochine County, AZ

If there is a charge for this service, please so notify, and a check will be sent forthwith.

Very truly yours,

Robert L. Doty

Q.



OFFICE OF

## Gil and Cas Conservation Commission

STATE OF ARIZONA 1645 WEST JEFFERSON, SUITE 420

PHOENIX, ARIZONA 85007 PHONE: (602) 255-5161

April 7, 1982

Memo: Russell Kolsrud, Office of Attorney General

From: A. K. Doss, Executive Director, O&GCC

Per our conversation, day-before-yesterday, please find enclosed copies of correspondence pertaining to Phillips Petroleum's request for an extension of confidentiality on the Tombstone well.

Please let us hear from you at your earliest convenience.

March 16, 1982

Mr. P. A. Wolgast Attorney-in-Fact Phillips Petroleum Company Woodside II-Greenwood Plaza 7800 E. Norado Place Englewood, Colorado 80111

> Re: Phillips Tombstone State A-1 S/4 S/4 Section 14-T20S-R23F Cochise County, Arizona State Permit No. 710

()

Dear Mr. Wolgast:

This is to acknowledge receipt of your letter of March 12, 1982 pertaining to the above reference.

Please be advised that the Commission will as! our Attorney General to advise us as to what action we should take in regard to your request for a three-month extension of confidentiality of the above well. I do not know how long it will take for us to get an Attorney General opinion on this, but in the interim the well information will remain confidential in our files.

I will contact you as soon as we receive a reply from our Attorney General.

Sincerely,

A. K. Doss Executive Director

AKD/vb

RECEIVED MAR 1 5 1982 D&G CONS. COMM.



### PHILLIPS PETROLEUM COMPANY

ENGLEWOOD, COLORADO 80111 WOODSIDE II -- GREENWOOD PLAZA 7800 E. DORADO PLACE

**EXPLORATION AND PRODUCTION GROUP** Western Division

March 12, 1982

RE: Phillips Tombstone State A-1 S/4 S/4 Section 14-T20S-R23E Cochise County, Arizona

Mr. A. K. Doss **Executive Secretary** Oil & Gas Commission State of Arizona 1645 West Jefferson, Suite 420 Phoenix, Arizona 85007

Dear Mr. Doss:

According to Phillips' records, the confidentiality period for the Tombstone State A-1 well expires March 16, 1982.

We are still attempting to obtain a re-drill or deepening through a deviated hole by farmout and wish to plug in some of the information being obtained in our current stratigraphic hole program to strengthen our case.

Consequently, Phillips Petroleum Company respectfully requests a three-month extension of the confidentiality period to hopefully obtain further testing of the Tombstone feature.

Yours very truly,

PHILLIPS PETROLEUM COMPANY

Attorney-in-Fact

RAW/sa



# THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85719

RECEIVED

NOV 27 1981

D&G CONS. COMM.

OFFICE OF ARID LANDS STUDIES

TEL. (602) 626-1955 Cable Address: ARIDLANDS TUCSON, ARIZONA

November 16, 1981

Memorandum To: A. K. Doss, Oil and Gas Commission Bob Larkin, State Land Department Dick Countryman, Commission on Agriculture and Horticulture

From:

Kennith Foster

Regarding:

Tombstone State A Well

Enclosed for your information is a copy of the report "Environmental Inventory, Monitoring and Reclamation Assistance for Tombstone State A, Phillips Petroleum Corporation.

This report represents the environmental inventory and site monitoring at the Tombstone site. The design and implementation of a reclamation plan is now under consideration.

KF/mlt

... CC: Dale Fisher



# PHILLIPS PETROLEUM COMPANY

ENGLEWOOD, COLORADO 80111 7800 E. DORADO PLACE

11-5-81

A. K. Doss Oil & Gas Conservation Commission 1645 West Jefferson # 420 Phoenix, Arizona 85007

Arizona Bureau of Geology University of Arizona 845 North Park Avenue Tucson, Arizona 85719

RE: Tombstone State #A-1 14-20S-23E Cochise County, Arizona

Gentlemen:

Enclosed please find: Disai Industrian-SFL Dismeters 846 Sometion Im De

If satisfactory, please sign and return one copy of this transmittal letter to me at the above address.

Sincerely,

TE

Tom Earley Staff Geologist

Moder

DATE 11/23/81

be still have not received a capy of your lithe-sample log. Please forward a capy as soon as possible so that we may complete our files. At



### Arixona -State Cand Department

1624 WEST ADAMS PHOENIX, ARIZONA 85007



Phillips were file

RECEIVED

OCT 2 0 1961

O & G CONS, COMM,

October 26, 1981

Mr. Robert E. Cowen
Box 908
Tombstone, Arizona 85638

Dear Mr. Cowen:

After careful consideration of State Land Department Oil and Gas Lease conditions, Oil and Gas Commission Rules and Regulations, and the applicable laws of the State of Arizona with regard to water production wells, it is our position that the water well placed on State Trust Land by Phillips Petroleum Corporation at D(20, 23) 14 dcc is an improvement placed by the oil and gas exploration lessee. Under terms of the Oil and Gas Lease (Section 9) the State Land Department, as owner of the land, is the sole owner of the well (bore and casing), as well as the groundwater beneath said land. This would negate any necessity of the overlying grazing lessee to file an Application to Place Improvements on Trust lands (either with or without prior permission); also any contract assigning the water well to the grazing lessee (other than for the pump, valves and appurtenent piping) is without validity. The well is considered as a non-reimbursable improvement, from which the SLD would allow extractions to be made in conjunction with the grazing operation:

We hope this serves to clarify the situation concerning the well associated with Oil and Gas Lease No. 51662. If you have any questions concerning the above, please give me a call at 255-4626.

Sincerely,

Kelly R Johnson, Director

Natura / Resources Conservation Division

KRJ/DWY/cn

CC: A.K. Doss, Oil & Gas Commission
Dale Fisher, Phillips Exploration
Dale Tersey, Tucson State Land Dept.

Russ Kolsrud, Attorney General

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CELEBORIES.

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PHILLIPS PETROLEUM COMPANY
ENGLEWOOD, COLORADO 80111
7800 E. DORADO PLACE

OCT 9 1981

O & G CONS. COMM.

October 7, 1981

A. K. Doss Oil & Gas Conservation Commission 1645 West Jefferson # 420 Phoenix, Arizona 85007

Arizona Bureau of Geology University of Arizona 845 North Park Avenue Tucson, Arizona 85719

RE: Tombstone State #A-1 14-20S-23E Cochise County, Arizona

Gentlemen:

Enclosed please find:

Final Well Report

If satisfactory, please sign and return one copy of this transmittal letter to me at the above address.

Sincerely,

Tom Earley

Staff Geologist

RECEIVED MORE

DATE 10-9-81

The Commission has not yet received eapier of the electrical logs.

PHILLIPS PETROLEUM COMPANY ENGLEWOOD, COLORADO 80111 7800 E. DORADO PLACE

RECEIVED OCT 2 1981 O & G CONS. COMM,

September 29, 1981

Don Whittaker Oil & Gas Conservation Commission 1645 West Jefferson # 420 Phoenix, Arizona 85007

Arizona Bureau of Geology University of Arizona 845 North Park Avenue Tucson, Arizona 85719

Tombstone State #A-1 14-20S-23E Cochise County, Arizona

Gentlemen:

Enclosed please find:

Final Mud log 70'-10,560'

If satisfactory, please sign and return one copy of this transmittal letter to me at the above address.

Tom Early

DATE 10/2/81

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PHILLIPS PETROLEUM COMPANY

AUG 1 0 1981

0 & G CONS. COMM.

NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111

DATE: 8/8/81

TO: ARIZONA OIL AND GAS CONSERVATION COMMISSION

1645 W. JEFFERSON, SUITE 420

PHOENIX, ARIZONA 85007

R. ATTN: MR. A.K. DOSS

FROM: Phillips Petroleum Company

Enclosed are the following packaged well cuttings from the Phillips Petroleum

Phillips Tombetone 1 State-A vell,

BOX NUMBER	INTERVAL	REMARKS
7008	9300'-10,560'	WASHED AND DRIED SAMPLES
		TO INTERMEDIATE CASING
		Poinst

Please acknowledge receipt of this shipment by signing and returning one copy of this data transmittal letter to:

Phillips Petroleum Company 7800 E. Dorado Place Englewood. Colorado 80111 Attn: Mr. D. W. Buelow

COMPANY: Air. Oild Gas Couservation Comman

716

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#716

August 3, 1981

Contraction !

Mr. R. A. Wolgast Land Manager Rocky Mountain Region Phillips Petroleum Company Woodside II - Greenwood Plaza 7800 E. Dorado Place Englewood, Colorado 80111

Dear Dick:

This is to acknowledge receipt of your letter of July 17th pertaining to letter of introduction.

I appreciate your securing this letter of introduction and I am sure we will experience no further difficulties at the rig.

Regards,

A. K. Doss Executive Director

AKD/vb

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CE: 100 FE

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PHILLIPS PETROLEUM COMPANY

ENGLEWOOD, COLORADO 80111

WOODSIDE II — GREENWOOD PLAZA 7800 E. DORADO PLACE

EXPLORATION AND PRODUCTION GROUP Northwest Division

JUL 22 1981

O&G CONS. COMM.

#716

July 17, 1981

RE: Letter of Introduction Tombstone State A #1 Tombstone, Arizona

Mr. A. K. Doss Executive Secretary Arizona Oil & Gas Conservation Commission 1645 West Jefferson Suite 420 Phoenix, Arizona 85007

Dear A.K.:

Attached is the letter I visited about with you. It should solve any future problems, but if you have any trouble with same just have them call in.

Also, please be reminded to hold any information you are given extremely confidential.

Regards,

R. A. Wolgast Land Manager

Rocky Mountain Region

RAW/sa

Att.

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Essential .

CAST COME

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RECEIVED JUL 23 1981

0 & G CONS. COMM.



July 17, 1981

#716

INTER-OFFICE CORRESPONDENCE / SUBJECT:
Denver

Phillips Tombstone State A #1 Sec. 14-T20S-R23E Arizona

TO: Wellsite Personnel

This will introduce Mr. A. K. Doss, Executive Secretary of the Arizona Oil and Gas Conservation Commission, and serve as your authorization to furnish him any information about the above-referenced well which he requests. Please cooperate fully with Mr. Doss.

C. W. Betton

Exploration Manager Rocky Mountain Region

CWB/sa

C

CHARLES !

ENGLEWOOD, COLORADO 80111 WOODSIDE II — GREENWOOD PLAZA 7800 E. DORADO PLACE

**EXPLORATION AND PRODUCTION GROUP** Northwest Division

July 28, 1981

RECEIVED JUL 30 1981

A.K. Doss Arizona Oil and Gas Conservation Commission 1645 West Jefferson Suite 420 Phoenix, Arizona 85007

O&G CONS. COMM.

Dear Mr. Doss:

With this letter we are sending core chips taken at one foot intervals from all the cores which have been cut to date at the Tombstone State A-1 well in Cochise County. The coring history of the well is as follows:

Core 1 - No recovery Core 2 - 5473' - 5479'
Core 3 - 6061' - 6090'
Core 4 - 6503' - 6516'
Core 5 - 8180' - 8186'
Core 6 - 8839' - 8840'
Core 7 - 8840' - 8844'

Any questions concerning these cores should be directed to me at (303) 779-8989, ext. 258.

Sincerely,

Jamie Robinson

cc: C.W. Betton (r) file

JR:bm

Jombstone 1-A State

PHILLIPS PETROLEUM COMPANY NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111 TO: Arizona Oil & Cas Conservation Commission 1645 W. Jefferson Suite 420 Phoening Ariz. 85007
Atm. W.E. Allen
FROM: Phillips Petroleum Company Enclosed are the following packaged well cuttings from the Phillips Petroleum PHILLIPS TOMBSTONE STATE-A-No. 1 COCHISE CO., ARIZONA BOX NUMBER INTERVAL 8100'- 9300'

Please acknowledge receipt of this shipment by signing and returning one copy

Phillips Petroleum Company 7800 E. Dorado Place Englewood. Colorado 80111 Attn: Mr. D. W. Buelow

DATE: 7-23-81

of this data transmittal letter to:

CHE & GAS CONSERVATION COMMISSION

STATE OF ARIZONA

1645 W. JEFFERSON, EUITE 420 TELEPHONE: 27T-8141 PHOENIX, ARIZONA 85007

RECEIVED BY:

COMPANY:

.

PHILLIPS PETROLEUM COMPANY

NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111

24 June 1981 DATE: TO: Ariz. Oil +60s Conservation Commission 1645 W. JEfferson Suite 430 Phoenix, Ariz. Attw: Mr. Don WMittaker FROM: Phillips Petroleum Company Enclosed are the following packaged well cuttings from the Phillips Petroleum PHILLIPS TOMBSTONE well, STATE-A-No. 1 COCHISE CO., ARIZONA REMARKS BOX NUMBER INTERVAL 6780- 8100 7006 washed & dried samples

Please acknowledge receipt of this shipment by signing and returning one copy of this data transmittal letter to:

Phillips Petroleum Company 7800 E. Dorado Place Englewood, Colorado 80111 Attn: Mr. D. W. Buelow

RECEIVED BY: W. N. WO.	DATE:	6-30-81
COMPANY: OIL & GAS CONSERVATION COMMISSION		

1648 W. Jets and the 40 ft 420 Tale House Deep 451 PROBLEM, ALEXONA 55007

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PHILLIPS PETROLEUM COMPANY

NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111

DATE: 6-2-81

TO: ARIZONA OIL AND GAS CONSERVATION COMMISSION

1645 WEST JEFFERSON

SUITE 420

PHOENIX, ARIZONA 85007

ATTN: MR DON WHITTAKER

FROM: Phillips Petroleum Company

Enclosed are the following packaged well cuttings from the Phillips Petroleum

PHILLIPS TOMBSTONE
STATE-A-NO. 1
COCHISE CO., ARIZONA
BOX NUMBER INTERVAL REMARKS

7005 5540-6780 WASHED AND DRIED
SAMPLES

Please acknowledge receipt of this shipment by signing and returning one copy of this data transmittal letter to:

Phillips Petroleum Company 7800 E. Dorado Place Englewood, Colorado 80111 Attn: Mr. D. W. Buelow

RECEIVED BY: W. E. Allen	DATE:	6-5-81
COMPANY: 0:1 & Gas Conservation Commission		

NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111 TO: ARIZONA OIL + GAS CON. COMM W. TEFFERSON PHOENIX A7 FROM: Phillips Petroleum Company Enclosed are the following packaged well cuttings from the Phillips Petroleum PHILLIPS TOMBSTONE well, STATE-A-No. 1 COCHISE CO., ARIZONA REMARKS BOX NUMBER WASHED + DRIED 7003

Please acknowledge receipt of this shipment by signing and returning one copy

Phillips Petroleum Company 7800 E. Dorado Place Englewood: Colorado 80111

Attn: Mr. D. W. Buelow

DATE:

PHILLIPS PETROLEUM COMPANY

e.

COMPANY:

RECEIVED BY:

OIL & GAS CONSERVATION COMMISSION STATE OF ARIZONA

of this data transmittal letter to:

1645 W. JEFFERSON, SUITE 420 TELEPHONE: 253-5161 PHOENIX, ARIZONA 85007 O

#### PHILLIPS PETROLEUM COMPANY

NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111

DATE: 27 April 1981

TO: Arizona Oil + Gas Conservation Commission

1645 WEL Jefferson Suite 420

Phoenin Arizona 85007

Arm: Mr. Don Whitraker

FROM: Phillips Petroleum Company

Enclosed are the following packaged well cuttings from the Phillips Petroleum

FRAUPS TOMBSTONE		ell,
ST.	ATE-A-No. 1 CO., ARIZONINTERVAL	REMARKS
7002	2110-33300	washes + died samples

Please acknowledge receipt of this shipment by signing and returning one copy of this data transmittal letter to:

Phillips Petroleum Company 7800 E. Dorado Place Englewood, Colorado 80111 Attn: Mr. D. W. Buelow

RECEIVED BY: DATE: 5-1-81

COMPANY: OIL & GAS CONSERVATION COMMISSION

STATE OF ARIZONA
1645 W. JEFFERSON, SUITE 420
TELEPHONE: 254-5161
PHOENIX, ARIZONA 85007

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() PHILLIPS PETROLEUM COMPANY NORTHWESTERN REGION 7800 E. Dorado Place Englewood, CO. 80111 DATE: 20 March 1981 TO: Arizona Oil+ Gas Conservation Comm. 1645 W. Jefferson, Swite 420 Proenix Ariz 85007 Arm: Don Whitraker FROM: Phillips Petroleum Company Enclosed are the following packaged well cuttings from the Phillips Petroleum

PHILUPS TOWNSTONE

PHILUPS TO STATE-A-No. 1 COCHISE CO., ARIZONA BOX NUMBER INTERVAL 70'-2110' 7001

Please acknowledge receipt of this shipment by signing and returning one copy

Phillips Petroleum Company 7800 E. Dorado Place Englewood, Colorado 80111 Attn: Mr. D. W. Buelow

DATE:

Ę

COMPANY:

RECEIVED BY:

OIL & GAS CONSERVATION COMMISSION
STATE OF ARIZONA

of this data transmittal letter to:

1645 W. JEFFERSON, SUITE 420 TELEPHONE: 275-5161 PHOENIX, ARIZONA 85007 O

W.

Casper, Wyoming 82601

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PHILLIPS PETROLEUM COMPANY
Box 2920

O & G CONS. COMM.

April 8, 1981

Mr. W. E. Allen Executive Secretary Oil and Gas Conservation Commission State of Arizona 1645 West Jefferson, Suite 420 Phoenix, Arizona 85007

Dear Mr. Allen,

In response to your letter of April 6, 1981, we are enclosing a copy of our daily report on the drilling activities of the Phillips Petroleum Tombstone State A No. 1 well.

We are extremely sorry for any inconvenience that our oversight in not sending the daily report might have caused you.

Sincerely yours,

Meredith Smart

Meredith K. Smart Production Clerk, PPCo. April 6, 1981

CONTRACTOR !

Mr. Dale J. Fisher District Superintendent Phillips Petroleum Company P.O. Box 2920 Casper, Wyoming 82602

Phillips Petroleum Tombstone State A No. 1
Section 14, Township 20 South, Range 23 East Weekly Report Cochise County, Arizona State Permit No. 716

Dear Dale:

For some reason we haven't been receiving the weekly report of operations on the subject well.

Will you please bring us up to date on the drilling activities and furnish us with the weekly report in the future.

Very truly yours,

W. E. Allen Executive Secretary

MEY/AP